

# MODEL G0651/G0652 10" EXTREME SERIES TABLE SAWS OWNER'S MANUAL



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# **WARNING**!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

# WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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### Foreword

We are proud to offer the Model G0651/G0652 10" Extreme Series Table Saw. This machine is part of a growing Grizzly family of fine woodworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The specifications, drawings, and photographs illustrated in this manual represent the Model G0651/G0652 when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at **www. grizzly.com**. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

# **Contact Info**

We stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc. 1203 Lycoming Mall Circle Muncy, PA 17756 Phone: (570) 546-9663 Fax: (800) 438-5901 E-Mail: techsupport@grizzly.com Web Site: http://www.grizzly.com

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc. <sup>c</sup>/<sub>o</sub> Technical Documentation Manager P.O. Box 2069 Bellingham, WA 98227-2069 Email: manuals@grizzly.com

### **Functional Overview**

A table saw is considered the primary machine in any woodworking shop and is capable of the following cuts:

- Rip and Crosscuts
- Miters, Bevels, Compound Miters
- Rabbets and Dadoes
- Tenons and Mortises
- Resaw Cuts

The main components of a table saw are the cabinet, table top, extension tables, main blade and arbor, rip fence, miter gauge, blade guard and splitter, and riving knife.

A typical rip cut using the table saw is made by adjusting the fence to the desired width of cut, setting the blade height and tilt with the handwheels, and placing the workpiece on the table against the fence so the waste portion of the workpiece is on the opposite side of the blade. Featherboards can be installed on the fence or clamped to an auxillary fence to control thin or narrow stock.

The operator turns the table saw **ON**, and while standing slightly to the side of the blade, uses a push stick to guide the workpiece through the blade. The saw blade teeth cut a kerf in the workpiece, which is held open by the splitter or riving knife, helping reduce the risk of kickback. The operator pushes the workpiece past the blade, turns the saw **OFF**, and waits until the blade has come to a complete stop before removing the workpiece.

A typical crosscut is performed in a similar manner, except the fence is removed and the miter guage is used to push the workpiece through the blade.

To produce accurate results, the miter slot and rip fence must be adjusted parallel to the blade. The type of cut to be performed typically determines the type of blade that will be used.





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

#### MODEL G0651 10" EXTREME SERIES TABLE SAW

#### **Product Dimensions:**

Weight	
Foot Print (Length/Width)	
Table Height	
Table Size	
Table w/Left Cast Iron Extension	
Table w/Left & Right Wooden Extensions	
Fence Tube	
Front Rail	
Rear Rail	
Overall Size when Fully Assembled	

#### **Shipping Dimensions:**

Box 1		
	Content	Cabinet
	Weight	
	Content Weight Length/Width/Height	
Box 2	2	
	Content	Front and Rear Rail
	Weight	
	Weight Length/Width/Height	
Box 3	3	
	Content	Fence
	Weight	
	Weight Length/Width/Height	
Box 4		
	Content	Front Extension Table and Outfeed Table
	Weight	
	Length/Width/Height	
Electrical:		

Switch	Magnetic, w/Thermal Overload Protection
Switch Voltage	
Cord Length	
Cord Gauge	
Recommended Breaker Size	
Plug	

#### Motor:

Туре	TEFC Capacitor Start Induction
Horsepower	
Voltage	
Phase	Single
Amps	
Speed	
Cycle	
Number Of Speeds	
Power Transfer	Belt Drive
Bearings	Shielded and Permanently Sealed



#### Main Specifications:

#### **Cutting Capacities**

Arbor Diameter Arbor Speed	
Maximum Blade Size	
Maximum Depth Of Cut @ 90°	
Blade Tilt	Left 0-45°
Maximum Depth Of Cut @ 45°	
Maximum Rip Capacity To Right Of Blade & Left	
Distance From Front Of Table To Center Of Blade	
Distance From Front Of Table To Front Of Blade	<b>10</b> <sup>5</sup> / <sub>16</sub> "
Maximum Width Of Dado Cut	<sup>3</sup> /4"

#### Construction

	Precision-Ground Cast Iron
Miter Gauge	Aluminum Body/Steel Miter Bar
Trunnions	Cast Iron
Bearings	Sealed & Permanently Lubricated
Guard	Steel Splitter/Clear Plastic
Fence	Single Lever, Front Locking, Aluminum Extruded Body

#### Other Specifications:

Country Of Origin	Taiwan
Warranty	
Serial Number Location	
Assembly Time	1 hour

#### Features:

Included Outfeed & Extension Tables w/Storage Shelves Digital Tilt Gauge Riving Knife Blade Guard Included 10" Blade Optional Dado Insert





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

#### MODEL G0652 10" EXTREME SERIES TABLE SAW

#### **Product Dimensions:**

Weight	
Foot Print (Length/Width)	
Table Height	
Table Size	
Table w/Left Cast Iron Extension	
Table w/Left & Right Wooden Extensions	
Fence Tube	
Front Rail	
Rear Rail	
Overall Size when Fully Assembled	

#### **Shipping Dimensions:**

Box 1	
Content	Cabinet
Weight	
Content Weight Length/Width/Height	
Box 2	
Content	Front and Rear Rail
Weight	
Weight Length/Width/Height	
Box 3	
Content	Fence
Weight	
Weight Length/Width/Height	
Box 4	
Content	Front Extension Table and Outfeed Table
Weight	
Length/Width/Height	
trical:	

#### **Electrical:**

Switch	Magnetic, w/Thermal Overload Protection
Switch Voltage	-
Cord Length	
Cord Gauge	
Recommended Breaker Size	
Plug	•

#### Motor:

Туре	TEFC Capacitor Start Induction
Horsepower	5 HP
Voltage	
Phase	
Amps	
Speed	
Cycle	
Number Of Speeds	1
Power Transfer	Belt Drive
Bearings	Shielded and Permanently Sealed



#### Main Specifications:

#### **Cutting Capacities**

Arbor Diameter	<sup>5</sup> /8"
Arbor Speed	
Maximum Blade Size	
Maximum Depth Of Cut @ 90°	
Blade Tilt	Left 0-45°
Maximum Depth Of Cut @ 45°	
Maximum Rip Capacity To Right Of Blade & Left	
Distance From Front Of Table To Center Of Blade	
Distance From Front Of Table To Front Of Blade	
Maximum Width Of Dado Cut	

#### Construction

	Precision-Ground Cast Iron
	Pre-Formed Steel
Miter Gauge	Aluminum Body/Steel Miter Bar
	Cast Iron
Bearings	Sealed & Permanently Lubricated
Guard	Steel Splitter/Clear Plastic
	Single Lever, Front Locking, Aluminum Extruded Body

#### **Other Specifications:**

Country Of Origin	Taiwan
Warranty	.1 Year
Serial Number LocationID Label on Center of the	e Stand
Assembly Time	. 1 hour

#### Features:

Included Outfeed & Extension Tables w/Storage Shelves Digital Tilt Gauge Riving Knife Blade Guard Included 10" Blade Optional Dado Insert



### Identification

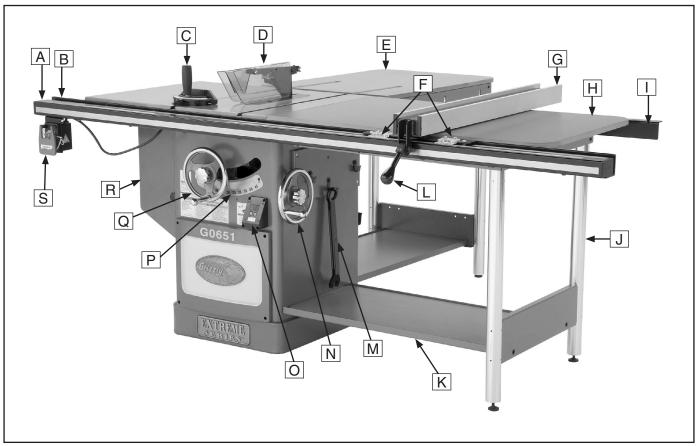


Figure 1. G0651 Identification.

- A. Front Rail Tube
- B. Front Rail
- C. Miter Gauge
- D. Blade Guard and Splitter
- E. Outfeed Table
- F. Fence Scale Indicator
- G. Fence
- H. Front (Main) Extension Table
- I. Rear Rail
- J. Support Leg

- K. Lower Shelf
- L. Fence Lock Handle
- M. Arbor Wrench
- N. Blade Tilt Handwheel & Lock
- **O.** Blade Angle Digital Readout
- P. Blade Tilt Scale
- **Q.** Blade Height Handwheel
- **R.** Motor Cover
- S. ON/OFF Switch w/Emergency STOP Paddle



# 

### For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

**AWARNING** Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

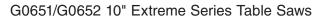
NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

# AWARNING Safety Instructions for Machinery

- 1. READ THE ENTIRE MANUAL BEFORE STARTING MACHINERY. Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY. Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
- 3. ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST. Most types of dust (wood, metal, etc.) can cause severe respiratory illnesses.

- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY. Machinery noise can cause permanent hearing loss.
- 5. WEAR PROPER APPAREL. DO NOT wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL. Be mentally alert at all times when running machinery.



# AWARNING Safety Instructions for Machinery

- 7. ONLY ALLOW TRAINED AND PROP-ERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY. Make sure operation instructions are safe and clearly understood.
- 8. KEEP CHILDREN AND VISITORS AWAY. Keep all children and visitors a safe distance from the work area.
- 9. MAKE WORKSHOP CHILDPROOF. Use padlocks, master switches, and remove start switch keys.
- **10. NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power *OFF* and allow all moving parts to come to a complete stop before leaving machine unattended.
- **11. DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
- 12. KEEP WORK AREA CLEAN AND WELL LIGHTED. Clutter and dark shadows may cause accidents.
- 13. USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE. Grounded cords minimize shock hazards. Undersized cords create excessive heat. Always replace damaged extension cords.
- 14. ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY. Make sure switch is in OFF position before reconnecting.
- **15. MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 16. MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.

- 17. REMOVE ADJUSTING KEYS AND WRENCHES. Make a habit of checking for keys and adjusting wrenches before turning machinery *ON*.
- 18. CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY. Check for binding or misaligned parts, broken parts, loose bolts, and any other conditions that may impair machine operation. Repair or replace damaged parts before operation.
- **19. USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. Improper accessories increase risk of injury.
- **20. DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
- 21. SECURE WORKPIECE. Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
- 22. DO NOT OVERREACH. Maintain stability and balance at all times.
- 23. MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR. Know and avoid conditions that cause the workpiece to "kickback."
- 24. ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.
- 25. CERTAIN DUST MAY BE HAZARDOUS to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.



# AWARNING Safety Instructions for Table Saws

- 1. SAFETY GUARDS. Always use the blade guard, splitter, or riving knife on "throughsawing" operations. The blade cuts completely through the top of the workpiece on through-sawing operations. Always use a riving knife for non-through cuts.
- 2. KICKBACK. Be familiar with kickback. Kickback happens when the workpiece is thrown towards the operator at a high rate of speed. Until you have a clear understanding of kickback and how it occurs, DO NOT operate this table saw!
- 3. **REACHING OVER SAW BLADE.** Never reach behind or over the blade with either hand while the saw is running; *hands or arms could be pulled into the saw blade if kickback occurs.*
- 4. WORKPIECE CONTROL. Make sure the workpiece is stable on the table and is supported by the rip fence or the miter gauge during cutting operations. DO NOT perform any cutting operations free-hand.
- 5. SAFETY ACCESSORIES. Use push sticks, hold-downs, featherboards, and other devices to increase cutting safety.
- 6. OPERATOR POSITION. Never stand or have any part of your body directly in-line with the cutting path of the saw blade. Avoid operations and hand positions where a slip could cause your hand to move into the blade.
- 7. CUT-OFF PIECES. Turn saw *OFF* before removing small workpiece cut-offs.

# **A**WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

- 8. CROSSCUTTING OPERATIONS. Remove the rip fence whenever using the miter gauge to crosscut a workpiece.
- **9. BLADE HEIGHT.** Always adjust the blade to the proper height above the workpiece.
- **10. WORKPIECE SUPPORT.** Provide adequate support to the rear and sides of the saw table for wide or long workpieces.
- **11. DAMAGED SAW BLADES.** Never use blades that have been dropped or otherwise damaged.
- 12. DADO AND RABBET OPERATIONS Dado and rabbeting operations require special attention because those operations must be performed with the blade guard removed. Always use a riving knife for dado and rabbeting operations,. and always immediately replace the blade guard after operations are complete.
- **13. CUTTING CORRECT MATERIAL.** This machine is intended for cutting natural and man-made wood products, laminate covered wood products, and some plastics. This machine is NOT designed to cut metal, glass, stone, tile, etc.; cutting these materials with a table saw may lead to injury.
- 14. EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Service Department at (570) 546-9663.

# 

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



# 

Statistics show that most common accidents among table saw users can be linked to kickback. Kickback is typically defined as the high-speed expulsion of stock from the table saw toward its operator. In addition to the danger of the operator or others in the area being struck by the flying stock, it is often the case that the operator's hands are pulled into the blade during the kickback.

# **Preventing Kickback**

Below are tips to avoid the most common causes of kickback:

- Only cut workpieces with at least one smooth and straight edge. DO NOT cut warped, cupped or twisted wood.
- Never attempt freehand cuts. If the workpiece is not fed parallel with the blade, kickback will likely occur. Always use the rip fence or crosscut fence to support the workpiece.
- Make sure the splitter or riving knife is aligned with the blade. A misaligned splitter can cause the workpiece to catch or bind, increasing the chance of kickback. If you think that your splitter is not aligned with the blade, check it immediately!
- Take the time to check and adjust the rip fence parallel with the blade; otherwise, the chances of kickback are extreme.
- Use the splitter or riving knife for all "through cuts." The splitter or riving knife maintains the kerf in the workpiece, reducing the chance of kickback. Always use the riving knife for all non-through operations.
- Feed cuts through to completion. Anytime you stop feeding a workpiece in the middle of a cut, the chance of kickback is greatly increased.

- Keep the blade guard installed and in good working order. Only remove it when performing non-through cuts and immediately reinstall the blade guard when finished with the non-through cut. Always use the riving knife for all non-through operations.
- Make multiple, shallow passes when performing a non-through cut. Making a deep non-through cut will greatly increase the chance of kickback.

# Protecting Yourself From Kickback

Even if you know how to prevent kickback, it may still happen. Here are some tips to protect yourself if kickback DOES occur:

- Stand to the side of the blade during every cut. If kickback does occur, the thrown workpiece usually travels directly in front of the blade.
- Wear safety glasses or a face shield. In the event of kickback, your eyes and face are the most vulnerable part of your body.
- Never, for any reason, place your hand behind the blade. Should kickback occur, your hand will be pulled into the blade.
- Use a push stick to keep your hands farther away from the moving blade. If kickback occurs, the push stick will most likely take the damage that your hand would have received.
- Use featherboards or anti-kickback devices to prevent or slow down kickback.



## **Glossary of Terms**

The following is a list of common definitions, terms and phrases used throughout this manual as they relate to this table saw and woodworking in general. Become familiar with these terms for assembling, adjusting or operating this machine. Your safety is **VERY** important to us at Grizzly!

- **Arbor:** A metal shaft extending from the drive mechanism that is the mounting location for the saw blade.
- **Bevel Edge Cut:** Tilting the arbor and saw blade to an angle between 0° and 45° to cut a beveled edge onto a workpiece.
- **Blade Guard:** Metal or plastic safety device that mounts over the saw blade. Its function is to prevent the operator from coming into contact with the saw blade.
- **Crosscut:** Cutting operation in which the crosscut fence is used to cut across the shortest width of the workpiece.
- **Dado Blade:** Blade or set of blades that are used to cut grooves and rabbets.
- **Dado Cut:** Cutting operation that uses a dado blade to cut a flat bottomed groove into the face of the workpiece.
- **Featherboard:** Safety device used to keep the workpiece against the rip fence and against the table surface.
- **Kerf:** The resulting cut or gap in the workpiece after the saw blade passes through during a cutting operation.
- **Kickback:** An event in which the workpiece is propelled back towards the operator at a high rate of speed.
- **Parallel:** Being an equal distance apart at every point along two given lines or planes (i.e. the rip fence face is parallel to the face of the saw blade).

- **Non-Through Cut:** A sawing operation that requires the removal of the blade guard and splitter or the riving knife. Dado and rabbet cuts are considered Non-Through Cuts because the blade does not protrude above the top face of the wood stock. Deep Non-Through Cuts must be made with multiple, light passes to reduce chance of kickback. Always remember to reinstall the blade guard and riving knife after performing a non-through cut.
- **Perpendicular:** Lines or planes that intersect and form right angles (i.e. the blade is perpendicular to the table surface).
- **Push Stick:** Safety device used to push the workpiece through a cutting operation. Used most often when rip cutting thin workpieces.
- **Rabbet:** Cutting operation that creates an L-shaped channel along the edge of the workpiece.
- **Riving Knife or Splitter:** Metal plate located behind the blade. It maintains the kerf opening in the wood when performing a cutting operation.
- **Straightedge:** A tool used to check the flatness, parallelism, or consistency of a surface(s).
- **Through Cut:** A sawing operation in which the workpiece is completely sawn through.
- **Rip Cut:** Cutting operation in which the rip fence is used to cut across the widest width of the workpiece.





# **SECTION 2: CIRCUIT REQUIREMENTS**

### Model G0651 220V Operation

# 

Serious personal injury could occur if you connect the machine to power before completing the setup process. DO NOT connect the machine to the power until instructed later in this manual.



# **A**WARNING

Electrocution or fire could result if machine is not grounded and installed in compliance with electrical codes. Compliance MUST be verified by a qualified electrician!

#### Full Load Amperage Draw

This machine draws the following amps under maximum load:

Amp Draw..... 15 Amps

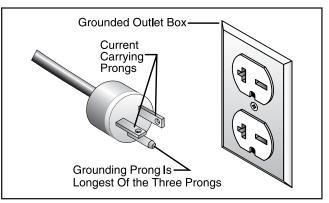
#### **Power Supply Circuit Requirements**

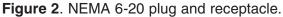
You MUST connect your machine to a grounded circuit that is rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.

Minimum Circuit Size......20 Amps

#### **Power Connection Device**

The type of plug required to connect your machine to power depends on the type of service you currently have or plan to install. We recommend using the plug shown in **Figure 2**.





#### **Extension Cords**

Using extension cords may reduce the life of the motor. Instead, place the machine near a power source. If you must use an extension cord:

- Use at least a 12 gauge cord that does not exceed 50 feet in length!
- The extension cord must also have a ground wire and plug pin.
- A qualified electrician MUST size cords over 50 feet long to prevent motor damage.



### Model G0652 220/440V Operation

# **A**WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the setup process. DO NOT connect the machine to the power source until instructed after setup.



Electrocution or fire could result if this machine is

not installed to code. You MUST ensure compliance by checking with a qualified electrician!

### NOTICE

The Model G0652 is prewired for 220V operation. If you plan to use your machine at 440V, you MUST have a qualified electrican perform the 440V conversion described on Page 15.

#### Full Load Amp Draw

G0652 220V 3-Phase	. 14 Amp
G0652 440V 3-Phase	7 Amp

#### **Power Supply Circuit Requirements**

You MUST connect your machine to a grounded circuit that is rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.

Minimum Circuit Size (220V)......20 Amps Minimum Circuit Size (440V)......15 Amps

#### **Minimum Cord Requirements**

For 220V connection, use a stranded-copper flexible cord that meets the minimum requirements listed below, does not exceed 50 ft., and has an insulation type that starts with "S." A qualified electrician MUST determine the best cord to use in your environment depending on exposure to moisture, heat, and oils.

For 440V connection, an electrician MUST hardwire the machine. The electrician who hardwires the machine will determine the appropriate wire to use inside the conduit.

G0652 220V 3-Phase....15-20/12 AWG, 300VAC G0652 440V 3-Phase..... Electrician to Hardwire

#### **Power Connection Device**

The power connection device depends on the type of installed or planned service. We recommend using one of the devices shown in **Figure 3**, depending on the voltage being used.

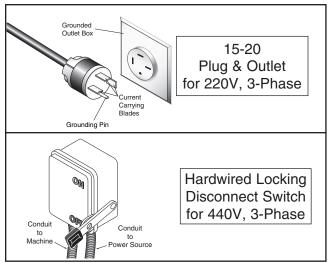


Figure 3. Recommended connection types.

#### **Phase Converter Precaution**

The power from the manufactured leg may damage electrical components if connected to the wrong incoming power terminal on your machine. Only connect the manufactured leg to the L3 terminal (see **Page 62** for identification).



## **440V Conversion**

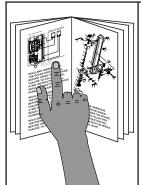
The Model G0652 can be converted for 440V operation. This conversion job consists of disconnecting the saw from the power source, rewiring the motor, switching the transformer fuse from 220V to 440V, and changing the thermal overload relay from 14 to 7 Amps. Refer to the photos and wiring diagram on **Pages 61** and **63** for wiring details.

All wiring changes must be inspected by a qualified electrician before the saw is connected to the power source. If, at any time during this procedure you need help, call Grizzly Tech Support at (570) 546-9663



# **SECTION 3: SETUP**

# Setup Safety



# WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



# Wear safety glasses dur-

ing the entire setup process!



### WARNING

This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

# Items Needed for Setup

The following items are needed to complete the setup process, but are not included with your machine:

#### Description

- Qty Straightedge 36" (or longer) ...... 1
- Straightedge 12" (or longer) ......1
- Level ...... 1 Hex Wrench 3mm.....1
- Safety Glasses (for each person)......1
- Dust Collection System ...... 1
- Dust Hose 4" (length as needed) ...... 1
- Hose Clamp 4" .....1
- Assistant for Lifting Help ...... 1

# Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, please immediately call Customer Service at (570) 546-9663 for advice.

Save the containers and all packing materials for possible inspection by the carrier or its agent. Otherwise, filing a freight claim can be difficult.

When you are completely satisfied with the condition of your shipment, inventory the contents.

# Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

**Note:** If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for shipping purposes.

#### **Table Saw Unit**

Bo	x Contents (Figure 4):	Qty
Α.	Table Saw Unit (not shown)	1
В.	Splitter/Guard Assembly	1
С.	Riving Knife	1
D.	Fence Resting Brackets	2
Ε.	Miter Gauge	1
F.	Miter Gauge Handle	1
	Handwheel Handles	
Η.	Arbor Wrenches	2

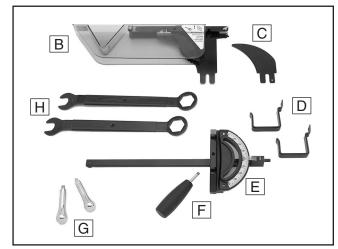


Figure 4. Main components.

#### Fasteners (and where used, not shown): Qty

- Flat Washer 8mm (Miter Gauge) ......1
- Hex Bolts M8-1.25 x 12 (Fence Brackets)..2
- Flat Washers 8mm (Fence Brackets) ....... 2
- Hex Bolts M8-1.25 x 12 (Switch) ......2
- Flat Washers 8mm (Switch) .....2
- Lock Washers 8mm (Switch)......2
- Flat Head Screw M5-8 x 20 (Insert) ...... 1

#### Tools (not shown)

Open-End Wrenches
 8 x 10, 11 x 13, 14 x 17......1 Each

Qty

- Hex Wrenches 3, 4, 5, 6mm......1 Each

#### Fence

#### Box Contents: (Figure 5) Qty

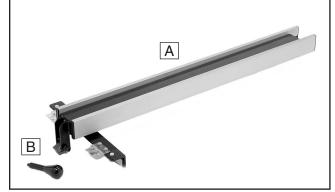


Figure 5. Fence components.

#### **Fence Rail**

Box Contents:	(Figure 6)	Qty

- **C.** Rear Rail (79" Long).....1

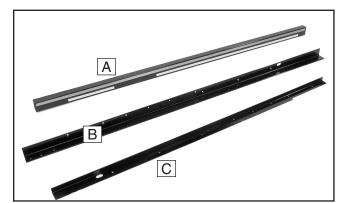


Figure 6. Fence rail components.



#### **Extension Table**

#### Box Contents: (Figure 7) Qtv A. Extension Table......1 Lower Shelf ......1 B. С. Shelf End Plate.....1 Support Legs......2 D. Ε. Fasteners (and where used, not shown): Qty Cap Screws M8-1.25 x 25 (Rear Rail/Cabinet/Ext. Table)......8 Flat Head Screws M8-1.25 x 25 Flat Washers 8mm (Front Rail/Ext. Table/Rear Rail) ..... 14 Hex Nuts M8-1.25 Lock Washers 8mm (Front Rail/Ext. Table/Rear Rail) ..... 10 Hex Bolts M8-1.25 x 12 (Cabinet/Ext. Table).....2 Flat Washers 8mm (Cabinet/Ext. Table) .... 2 Flat Head Screws M8-1.25 x 25 (Table/Ext. Table) ......2 Hex Bolts M6-1 x 12 (Brackets/Cabinet/Legs) ..... 2 Hex Nuts M6-1

- (Ext Table/Legs/Shelf Brackets) ...... 16
  Hex Bolts w/Washers M8-1.25 x 12
- (Tube/ Front Rail)......9

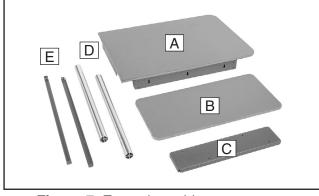


Figure 7. Extension table components.

#### **Outfeed Table**

#### Box Contents: (Figure 8) Qtv A. Outfeed Table.....1 Lower Shelf ......1 B. C Shelf End Plate.....1 Support Legs......2 D. Ε. Fasteners (and where used, not shown): Qty Hex Bolts M8-1.25 x 20 w/Washer (Rear Rail/Outfeed Table).....2 Hex Nuts M8-1.25 (Rear Rail/Outfeed Table)......2 Flat Washers 8mm (Rear Rail/Outfeed Table)......2 Hex Bolts M6-1 x 12 (Brackets/Cabinet) ......2 Hex Nuts M6-1 (Bracket/End Plate) ......2 Flat Washers 6mm • (Outfeed Table/Legs/Shelf Brackets)...... 16 Phillips Head Screws M6-1 x 12 • (Outfeed Table/Legs/Shelf Brackets)...... 14

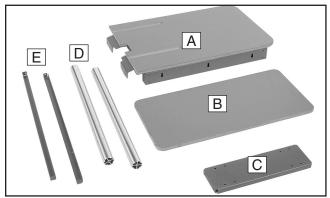
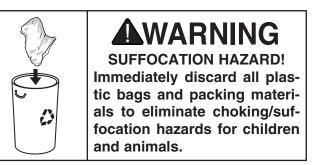


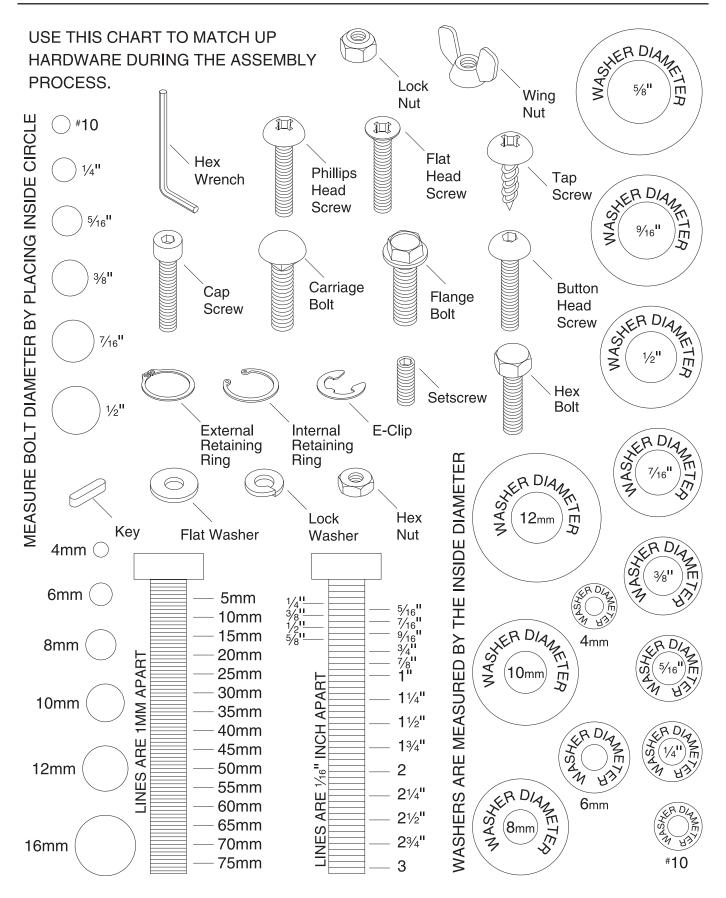
Figure 8. Outfeed table components.



If any nonproprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.



# **Hardware Recognition Chart**



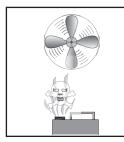
# Clean Up

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser, such as shown in **Figure 9**. For thorough cleaning, some parts must be removed. **For optimum performance, clean all moving parts or sliding contact surfaces.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.



## 

Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. DO NOT use these products to clean the machinery.



#### A CAUTION Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

#### G2544—Solvent Cleaner & Degreaser

A great product for removing the waxy shipping grease from your machine during clean up.



Figure 9. Cleaner/degreaser available from Grizzly.

#### Floor Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some residential floors may require additional reinforcement to support both the machine and operator.

#### **Placement Location**

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 10** for the minimum working clearances.

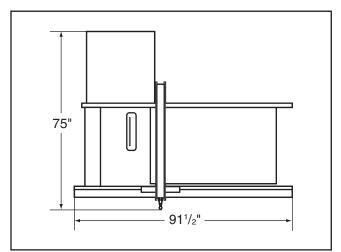
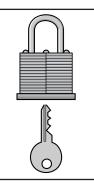


Figure 10. Minimum working clearances.



# 

Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.



# Assembly

### To assemble the extension table and outfeed tables:

 Fasten the 91<sup>1</sup>/<sub>2</sub>" front rail onto the table saw with four M8-1.25 x 25 flat head screws, as shown in Figure 11. Also, secure the far left side of the rail with an M8-1.25 x 25 flat head screw, lock washer and hex nut.

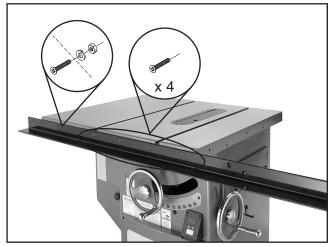


Figure 11. Front rail installed.

 Fasten the 79" rear rail to the table with four M8-1.25 x 25 cap screws, lock washers, and flat washers, as shown in Figure 12. Secure the left side of the rail to the table with an M8-1.25 x 25 cap screw, two flat washers, two lock washers, and a hex nut.

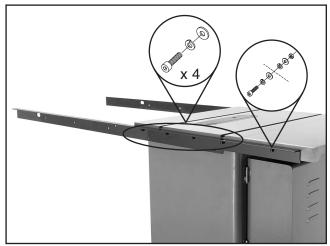


Figure 12. Rear rail installed.

Secure the metal plates to the table with M8-1.25 x 25 flat head screws on the right side of the table saw cabinet, as shown in (Figure 13), then thread two M8-1.25 x 12 hex bolts with flat washers into the metal plates. Do not fully tighten the bolts.

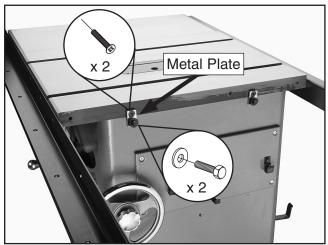


Figure 13. Metal plates installed.

- With the help of an assistant, place the extension table between the rails and slide the table slots over the hex bolts installed in Step 3.
- While an assistant holds the extension table, fasten the 91<sup>1</sup>/<sub>2</sub>" front rail to the extension table with three M8-1.25 x 25 flat head screws, flat washers, lock washers, and hex nuts (Figure 14). Finger-tighten for now.

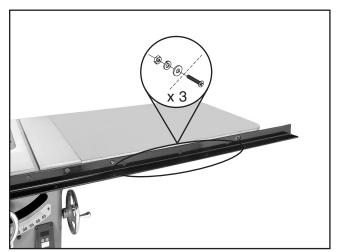


Figure 14. Front rail/table fastener locations.



6. Fasten the 79" rear rail to the extension table with three M8-1.25 x 25 cap screws, three lock washers, six flat washers, and three hex nuts, as shown in **Figure 15**. Finger tighten for now.

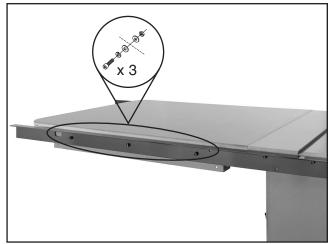


Figure 15. Rear rail/table fastener locations.

 Align the table and extension table with a straightedge (Figure 16), then tighten the fasteners in Figure 14 with a 5mm hex wrench and 13mm wrench.



Figure 16. Aligning main extension table.

- 8. Repeat the aligning procedure and tighten the fasteners in **Figure 15** with a 6mm hex wrench and 13mm wrench.
- 9. Tighten the cap screws shown in **Figure 13**.
- Install each foot with a <sup>3</sup>/<sub>8</sub>-16 hex nut onto into the bottom of a support leg, as shown in Figure 17.

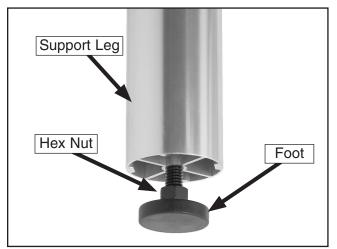


Figure 17. Foot installed on support leg.

Fasten each support leg to the main extension table with four M6-1 x 12 Phillips head screws and flat washers, as shown in Figure 18.

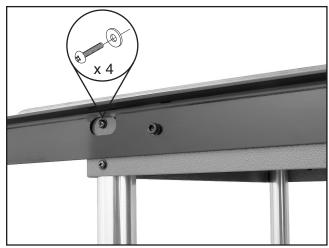


Figure 18. Support leg fastened to main extension table.

**12.** Rotate both feet until they touch the ground, and tighten the hex nuts against the support legs to secure the feet.



**13.** Fasten the shelf end plate to the legs with four M6-1 x 12 Phillips head screws and flat washers, as shown in **Figure 19**.



Figure 19. Installing shelf end plate on extension table legs.

 Place the shelf brackets between the cabinet and support legs, and fasten with two M6-1 x 12 Phillip head screws, two M6-1 x 12 hex bolts, four flat washers and two hex nuts, as shown in Figure 20.

**Note:** The flange on the shelf bracket must point up to ensure proper installation.

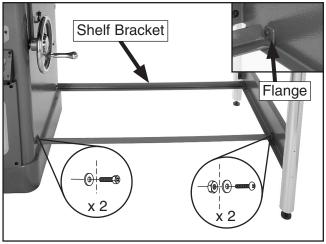


Figure 20. Shelf brackets installed.

- **15.** Place the lower shelf on the brackets.
- **16.** Turn the outfeed table upside down and place it on a level surface.

- **17.** Repeat **Steps 10-13** to install the feet, support legs, and shelf end plate on the outfeed table.
- 18. Place the outfeed extension table assembly upright with the feet on the ground, align the slots in the extension table bracket with the rear rail mounting holes, then fasten the table to the rail with two M8-1.25 x 20 hex bolts, flat washers, and hex nuts, as shown in Figure 21.

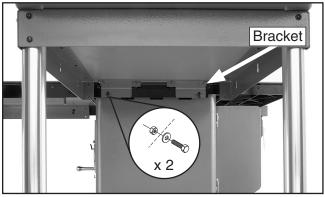


Figure 21. Outfeed table fastened to rear rail.

- **19.** Secure the lower shelf brackets to the support legs and cabinet, using the same fasteners as in **Step 14.**
- **20.** Install the lower shelf on the brackets.
- Place the 91<sup>1</sup>/<sub>2</sub>" fence tube over the 91<sup>1</sup>/<sub>2</sub>" front rail and secure with nine M8-1.25 x 12 hex bolts with washers, as shown in Figure 22.

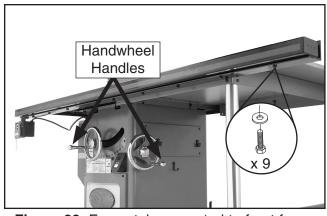


Figure 22. Fence tube mounted to front fence rail.

22. Install the handwheel handles, as shown in Figure 22.



## **A**WARNING

The saw blade is extremely sharp. Use extra care when handling the blade or working near it. Serious injury is possible.

Review this section, even if your saw blade came pre-installed.

#### To install the blade:

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Put on heavy leather gloves.
- **3.** Remove the table insert, blade guard, and splitter–if previously installed.
- 4. Use the arbor wrenches to loosen and remove the arbor nut, flange, and blade.

**Note:** The arbor nut has right hand threads; turn it counterclockwise to loosen.

5. Slide the blade over the arbor with the teeth facing the front of the saw, as shown in **Figure 23**.

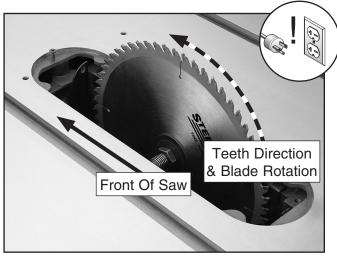


Figure 23. Correct blade direction.

6. Re-install the arbor flange and the arbor nut, and tighten them against the blade with the wrenches included with the saw. DO NOT overtighten.

# Blade Guard and Splitter

You MUST install the blade guard and splitter before operating the table saw.

#### To install the blade guard:

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Put on heavy leather gloves.
- **3.** Raise the blade up all the way.
- 4. Using an arbor wrench, loosen the hex bolt shown in **Figure 24**.

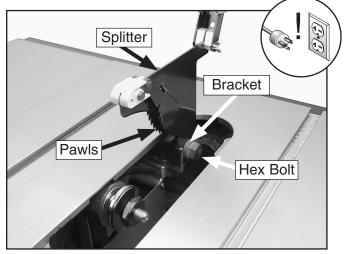


Figure 24. Blade guard and splitter installed.

- 5. Insert the splitter into the bracket slot, and tighten the hex bolt to lock the splitter.
- 6. Lift up on the splitter pawls and install the table insert (see **Table Insert**, **Page 25**).



# **Riving Knife**

Review this section, even if your saw riving knife came pre-installed. You must install the riving knife or the splitter and blade guard before operating the table saw.

#### To install the riving knife:

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Put on heavy leather gloves.
- **3.** Remove the table insert, blade guard, and splitter—if previously installed.
- **4.** Loosen the hex bolt (**Figure 25**), insert the riving knife into the bracket slot, and tighten the hex bolt to secure the riving knife.

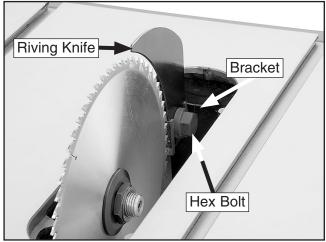


Figure 25. Riving knife installed.

5. Install the table insert, as described in **Table** Insert.

You MUST install the table insert before operating the table saw.

#### To install and adjust the table insert:

- 1. DISCONNECT THE SAW FROM POWER!
- **2.** Place the table insert into the table, then place a straightedge across the table and the table insert.
- **3.** Use a 3mm hex wrench and straightedge to adjust the table insert flush with the table as shown in **Figure 26**.

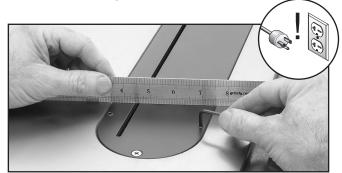


Figure 26. Adjusting the table insert.

The table insert must be flush with the table top or the workpiece will hit the edge of the table insert at the beginning of the cut.

**4.** Tighten the M5-.8 x 20 flat head screw shown in **Figure 27**.

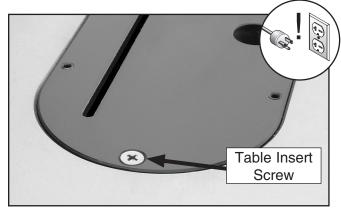


Figure 27. Table insert screw.

**Note:** Do not overtighten the table insert screw. If you have questions, contact Technical Support.



# **On/Off Switch**

To install the switch, fasten the switch to the left end of the front rail with two M8-1.25 x 12 hex bolts, flat washers and lock washers, and install the anti-start safety pin as shown in **Figure 28**.

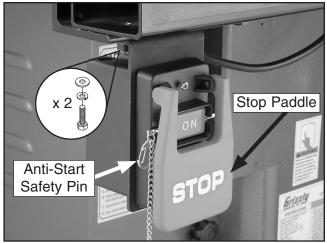


Figure 28. Switch installed.

# Miter Gauge

To assemble the miter gauge, install the miter gauge handle and 8mm flat washer onto the miter gauge as shown in **Figure 29**. Slide the miter gauge into the miter gauge slot to the left of the blade; or store it temporarily on the brackets near the blade angle handwheel.

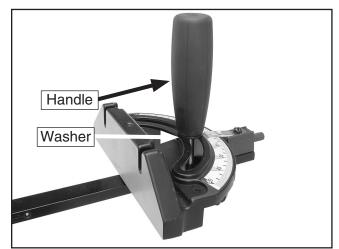


Figure 29. Miter gauge installed.



## **Fence Components**

To install the fence knobs, fence, and fence resting brackets:

1. Install the fence knob as shown in Figure 30.

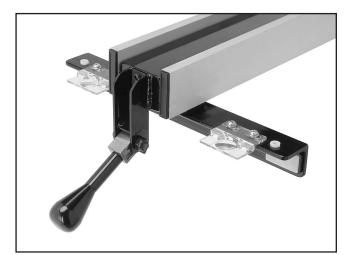


Figure 30. Fence knob installed.

- 2. Install the fence onto the table to the right of the blade.
- 3. Check for fence parallelism and adjust if needed. See Adjusting Fence on Page 56.
- Install the fence resting brackets (Figure 31) onto the back of the cabinet with the two M8-1.25 x 12 hex bolts and flat washers.

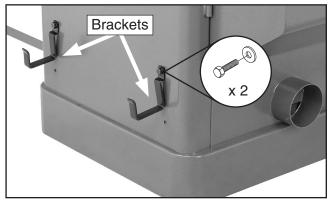


Figure 31. Fence resting brackets installed.

# **Dust Collection**

# 

DO NOT operate the Model G0651/G0652 without an adequate dust collection system. This saw creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Components and Hardware Needed:	Qty
4" Dust Hose (not included)	1
4" Hose Clamp (not included)	2
Dust Collection System (not included)	1

**Recommended CFM at Dust Port: 400 CFM** Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

#### To connect a dust collection hose:

- 1. Fit the 4" dust hose over the dust port, as shown in **Figure 32**, and secure in place with a hose clamp.
- 2. Tug the hose to make sure it does not come off. Note: A tight fit is necessary for proper performance.

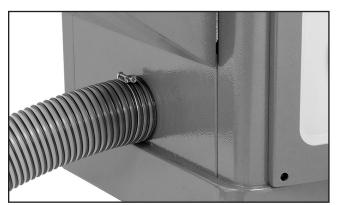


Figure 32. Dust hose attached to dust port.



# Test Run

Once the assembly is complete, test run your machine to make sure it runs properly for regular operations.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, 2) the safety disabling mechanism on the switch works correctly, and 3) the saw operates without unusual noises or vibration.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review the **Troubleshooting** on **Page 47**.

If you still cannot remedy a problem, contact our Tech Support at (570) 546-9663 for assistance.

#### To test run the machine:

- 1. Read this manual and make sure you understand SECTION 1: SAFETY on Page 8.
- Review CIRCUIT REQUIREMENTS on Page 13, double check your work, and make any necessary changes.
- 3. Make sure the blade guard and splitter (or riving knife) are installed and correctly adjusted, and verify that the blade is secured by the arbor nut.
- 4. Remove all tools and foreign objects from the machine.
- 5. Connect the tablesaw to the power source.
- 6. Put on safety glasses and hearing protection, and make sure any bystanders are wearing safety glasses, hearing protection, and are out of the way.
- 7. Make sure the safety pin is not installed.

- 8. Verify that the machine is operating correctly by pressing the ON button.
  - —If the saw is operating normally, press the STOP paddle. This should stop the saw.

—If any problems occur, immediately press the STOP paddle and DISCONNECT THE SAW FROM THE POWER SOURCE. Turn to **Troubleshooting** on **Page 47** and correct the problem before starting the table saw again.

- —If you cannot easily locate the source of an unusual noise or vibration by yourself, please contact Technical Support at (570) 546-9663.
- **9.** Lift the paddle switch and insert the safety pin through the ON button.
- 10. Press the ON button.
  - -If the saw does not start, the safety disabling feature is working correctly.
  - —If the saw starts, immediately press the OFF button and DISCONNECT THE SAW FROM THE POWER SOURCE. The safety disabling feature is not working correctly. Please contact our Technical Support at (570) 546-9663 immediately.



- **11. Model G0652 only:** Verify that the power is connected in phase by starting/stopping the table saw and determining if the motor turns in the correct direction, using the criteria below:
  - -If the blade turns clockwise (toward the front of the saw), it is turning in the correct direction.
  - -If the blade turns counterclockwise, (toward the back of the saw), it is turning in the wrong direction.

Stop the table saw, shut *OFF* the power source, swap any two of the three power wires—L1, L2, or L3—that connect to the saw. If using a phase converter for 220V 3-phase operation, ONLY swap L1 and L2, as shown in **Figure 33**.

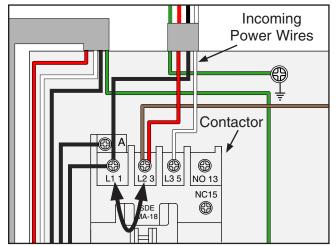


Figure 33. Example of switching incoming power wires L1 and L2.

**12.** The saw is now ready to operate.

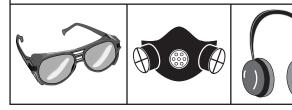


# **SECTION 4: OPERATIONS**

### **Operation Safety**

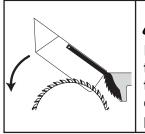
# 

Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.





#### **AWARNING** Loose hair and clothing can get caught in machinery and cause serious personal injury. Keep loose clothing and long hair



# 

away from machinery.

Keep the blade guard in the down position at all times. Failure to do this could result in serious personal injury or death.

### NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY REC-OMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

# **Basic Controls**

This section covers the basic controls used during routine operations.

ON Button: Starts motor.

**Stop Paddle/Off Button:** Stops motor when pushed in.

Safety Pin & Chain: Disable the saw and prevent accidental startup by inserting the safety pin through the holes in the ON button, and insert the end of the chain into the pin, as shown in Figure 34.

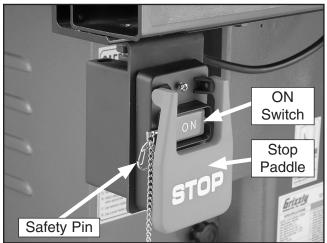


Figure 34. Switch disabled.



**Blade Tilt:** To adjust the blade tilt, loosen the blade tilt lock, turn the blade tilt handwheel to position the blade at the desired angle, and tighten the lock shown in **Figure 35**.

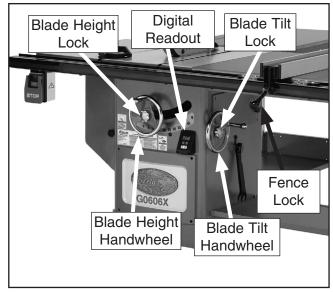


Figure 35. Basic table saw controls.

**Blade Height**: To set the blade height, unlock the blade height lock, turn the handwheel to set the blade height approximately <sup>1</sup>/<sub>4</sub>" higher than the workpiece, then re-tighten the blade height lock.

**Fence Lock:** After adjusting the fence to the desired width of cut, lock it in place by firmly pushing the fence lock down until it stops.

**Digital Readout:** Displays the current blade angle when the handwheel is moved and power is connected to the table saw. See **Page 53** for setting the digital readout.

## **Blade Selection**

This section on blade selection is by no means comprehensive. Always follow the saw blade manufacturer's recommendations to ensure safe and efficient operation of your table saw.

#### **Ripping blade features:**

- Best for cutting with the grain of the workpiece.
- 20-40 teeth.
- Flat-top ground tooth profile.
- Large gullets for large chip removal.

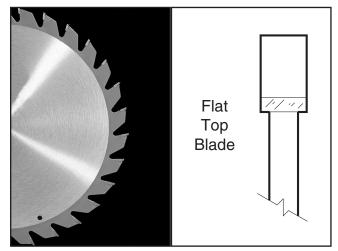


Figure 36. Ripping blade.

#### **Crosscut blade features:**

- Best for cutting across the grain of the workpiece.
- 60-80 teeth.
- Alternate top bevel tooth profile.
- Small hook angle and a shallow gullet.

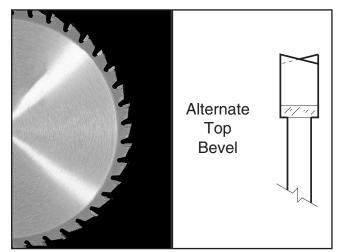


Figure 37. Crosscutting blade.



#### Combination blade features:

- Adequate for cutting both with and across the grain.
- 40-50 teeth.
- Alternate top bevel and flat, or alternate top bevel and raker tooth profile.
- Teeth are arranged in groups of five.
- Gullets are small and shallow within the groups of five teeth, similar to a cross-cut blade; then large and deep between each group of five, like a ripping blade.

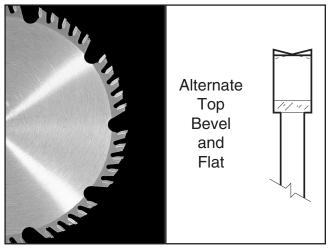


Figure 38. Combination blade.

#### Laminate blade features:

- Best for cutting plywood or veneer.
- 40-80 teeth.
- Triple chip tooth profile.
- Very shallow gullet.

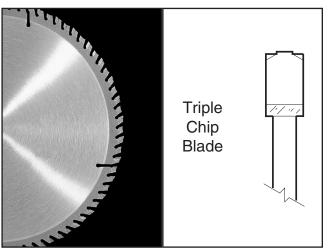


Figure 39. Laminate blade.

#### Dado Blades:

There are two types of dado blades: stacked and wobble.

• Stacked Dado Blade: These dedicated dado cutting blade sets consist of up to 8 individual blades. Multiple cutters are "stacked" between two outside blades. The width of the dado is determined by the combination of cutters that are "stacked" together. The dado is cut in a single pass leaving a smooth and square channel in the face of the workpiece. Stacked dado blades are the most expensive option, but are worth considering if your projects require a lot of visible dado cuts. A stacked dado blade is shown in Figure 40.



Figure 40. Stacked dado blade.

• Wobble Dado Blade: Also a dedicated dado blade, a wobble blade usually consists of a single blade that is tilted on the arbor shaft while it is spinning. The channel is cut in the face of the workpiece as the blade passes through its pre-adjusted width of travel. Wobble blades are an inexpensive option when visibly pleasing channels are not a concern.



### Workpiece Inspection

Some workpieces are not safe to cut or may require modification before they are safe to cut. Before cutting, inspecting all workpieces for the following:

- *Material Type:* This machine is intended for cutting natural and man-made wood products, laminate covered wood products, and some plastics. Cutting drywall or cementitious backer board creates extremely fine dust and may reduce the life of the bearings. This machine is NOT designed to cut metal, glass, stone, tile, etc.; cutting these materials with a table saw may lead to injury.
- *Foreign Objects:* Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator, cause kickback, or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT cut the workpiece.
- Large/Loose Knots: Loose knots can become dislodged during the cutting operation. Large knots can cause kickback and machine damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid cutting through them.
- *Wet or "Green" Stock:* Cutting wood with a moisture content over 20% causes unnecessary wear on the blades, increases the risk of kickback, and yields poor results.
- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being cut. DO NOT use workpieces with these characteristics!
- *Minor Warping:* Workpieces with slight cupping can be safely supported if the cupped side is facing the table or the fence. On the contrary, a workpiece supported on the bowed side will rock during a cut and could cause kickback or severe injury.

# Non-Through & Through Cuts

#### **Non-Through Cuts**

A non-through cut is a sawing operation where the blade does not protrude above the top face of the wood stock. Since non-through cuts require the removal of the blade guard and splitter, the riving knife must be installed. Dado cuts, rabbet cuts, and resawing operations are non-through cuts that can be performed with this table saw.

Non-through cuts have a higher risk of injury from kickback because the splitter and blade guard must be removed. Kickback is an event in which the workpiece is propelled back towards the operator at a high rate of speed. Always remember to re-install the blade guard and splitter after performing a non-through cut.

Non-through cuts have a risk of kickback. Read, understand, and follow instructions and safety precautions for each type of cut to reduce the risk of injury.

#### **Through Cuts**

A through cut is a sawing operation in which the workpiece is completely sawn through. Ripping, crosscutting, miter cuts, and angled cuts are all through cutting operations. The blade guard and splitter or riving knife must be installed during through cuts.

Through cuts have a risk of kickback. Read, understand, and follow instructions and safety precautions for each type of cut to reduce the risk of injury.

# Safety precautions and instructions for each type of cut are located on the following pages:

- Ripping: Page 34
- Crosscutting: Page 35
- Miter Cuts: Page 35
- Blade Tilt & Bevel Cuts: Page 36
- Dado Cutting: Page 36
- Rabbet Cutting: Page 38
- Resawing: Page 40



# Ripping

"Ripping" means cutting with the grain of a natural wood workpiece. In other man-made materials such as MDF or plywood, ripping simply means cutting lengthwise.

# 

Serious injury can be caused by kickback. Kickback is a high-speed expulsion of stock from the tablesaw toward an operator. The operator or bystanders may be struck by flying stock, or the operator's hands can be pulled into the blade during the kickback.

#### To make a rip cut:

- 1. Review **Preventing Kickback** on **Page 11** and take the necessary precautions to prevent kickback.
- 2. If using natural wood, joint one long edge of the workpiece on a jointer.
- 3. DISCONNECT THE SAW FROM POWER!
- 4. Ensure that the blade guard and splitter or riving knife is installed.
- 5. Set the fence to the desired width of cut on the scale.
- **6.** Adjust the blade height so the highest saw tooth protrudes approximately <sup>1</sup>/<sub>4</sub>" above the workpiece.
- 7. Set up safety devices such as featherboards or other anti-kickback devices.
- 8. Rotate the blade to make sure it does not come into contact with any of the safety devices.
- 9. Plug the saw into the power source, turn it *ON*, and allow it to reach full speed.

**Note:** The jointed edge of the workpiece must slide against the fence during the cutting operation.

10. Use a push stick to feed the workpiece through the saw blade, as shown in Figure 41, until the workpiece is completely past the saw blade.

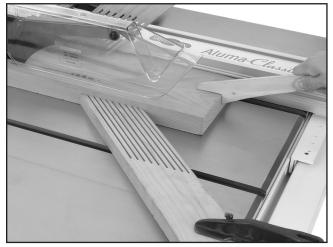
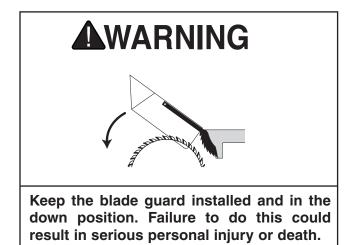


Figure 41. Typical ripping operation.

# 

Turn *OFF* the saw and allow the blade to come to a complete stop before removing the cut-off piece. Failure to follow this warning could result in serious personal injury.





## Crosscutting

"Crosscutting" means cutting across the grain of a natural wood workpiece. In other man-made materials, such as MDF or plywood, crosscutting means cutting across the width of the workpiece.

#### To make a crosscut using the miter gauge:

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Ensure that the blade guard and splitter (or the riving knife) is installed.
- **3.** Move the rip fence aside and position the miter gauge, adjusted to 90°, in a miter slot.
- 4. Adjust the blade height so the teeth protrude approximately <sup>1</sup>/<sub>4</sub>" above the workpiece.
- 5. Slide the miter gauge near the blade and adjust the workpiece so the blade will cut on the waste side of the line.
- 6. Plug in the tablesaw, turn it *ON*, and allow it to reach full speed.
- 7. Hold the workpiece firmly against the face of the miter gauge (**Figure 42**), and ease it through the blade until the workpiece is completely past the saw blade.

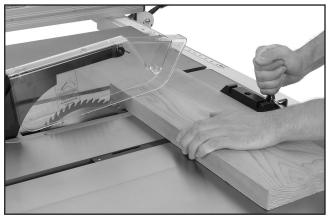


Figure 42. Typical crosscutting operation.

### WARNING

Turn *OFF* the saw and allow the blade to come to a complete stop before removing the cut-off piece. Failure to follow this warning could result in serious personal injury A miter is an angled crosscut. Miters are usually cut in the same manner as crosscuts, using the miter gauge and a predetermined mark on the workpiece.

#### To perform a miter cut:

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Ensure that the blade guard and splitter (or the riving knife) is installed.
- **3.** Determine the angle of your cut. If the angle needs to be very precise, use a protractor to set the miter gauge to the blade.
- 4. Place the face of the miter gauge against the edge of the workpiece and place the bar across the face of the workpiece. Use the bar as a guide to mark your cut as shown in **Figure 43**.

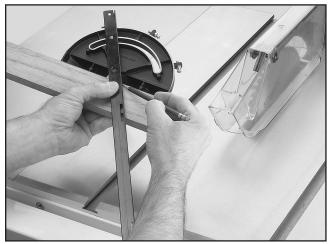


Figure 43. Example of marking miter line.

- 5. Place the miter gauge back into the slot and hold the workpiece firmly against the miter gauge body. Slide the miter gauge near the blade and adjust the workpiece so the blade will cut on the waste side of the line.
- 6. Proceed to make the cut in the same manner as described in the **Crosscutting** instructions.

## **Blade Tilt/Bevel Cuts**

When the blade tilt stop bolts are properly adjusted (**Page 51**), the blade tilt handwheel allows the operator to tilt the blade to the left, anywhere between  $0^{\circ}$  and  $45^{\circ}$ . This is used most often when cutting bevels, compound miters or chamfers. **Figure 44** shows an example of the blade when tilted to  $45^{\circ}$ .



Figure 44. Blade tilted to 45° for bevel cutting on a typical table saw.

# **Dado Cutting**

Commonly used in furniture joinery, a dado is a straight channel cut in the face of the workpiece. Dadoes can be cut using either a dedicated dado blade or a standard saw blade. The optional zero clearance table insert, Model T20645, (see **Page 44**) must be installed during dado cutting with a dado blade.

The table saw motor is pushed to its limits when making a dado cut. If the motor starts to bog down, slow down your feed rate and make multiple shallow passes.

## 

Dado operations require proper procedures to avoid serious injury. Extra care must be taken to prevent kickback when using dado blades. Any movement of the workpiece away from the fence will cause kickback. Be certain that stock is flat and straight. Failure to follow these warnings could result in serious personal injury.

# 

DO NOT make a through-cut with a dado blade. Dado blades are not designed for through cuts. Failure to follow this warning could result in serious personal injury.

# 

Always use push sticks, featherboards, push paddles and other safety accessories whenever possible to increase safety and control during operations which require that the blade guard and splitter must be removed from the saw. ALWAYS replace the blade guard after dadoing is complete.

# Using a Stacked or Wobble Dado Blade

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Remove the table insert, the blade guard and splitter, and the saw blade.
- **3.** Attach and adjust the dado blade system according to the dado blade manufacturer's instructions.
- 4. Install the optional zero clearance insert.
- 5. Raise the dado blade up to the desired depth of cut (depth of dado channel desired). When cutting deep dadoes, take more than one pass to reduce the risk of kickback.

# WARNING

The danger of kickback increases relative to the depth and width of a cut. Reduce the risk of kickback by making multiple passes to achieve the desired depth of cut. Failure to follow these warnings could result in serious personal injury.



Adjust the distance between the fence and the inside edge of the blade as shown in Figure 45 to dado the length of a workpiece.

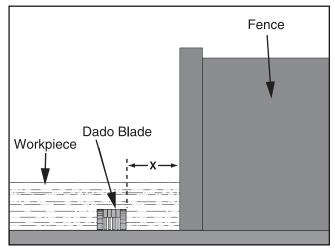


Figure 45. Stacked or wobble dado cut.

7. If dadoing across the workpiece, use the miter gauge and carefully line up the desired cut with the dado blade. DO NOT use the fence in combination with the miter gauge.

### 

Never try to dado a board that is not flat by holding it down against the table. If kickback occurs, your hand will likely be pulled into the blade, resulting in serious personal injury.

## 

Always use push sticks, featherboards, push paddles and other safety accessories whenever possible to increase safety and control during operations which require that the blade guard and splitter must be removed from the saw. ALWAYS replace the blade guard after dadoing is complete.

- 8. Reconnect the saw to the power source.
- **9.** Turn the saw *ON.* The blade should run smooth, with no vibrations.
- **10.** When the blade has reached full speed, perform a test cut with a scrap piece of wood.
- **11.** If the cut is satisfactory, repeat the cut with the actual workpiece.

## Using a Standard Saw Blade to Cut Dadoes

**Note:** Reduce motor overloading and blade wear by using a ripping blade. Ripping blades are designed to clear the sawdust quickly. See **Page 31** for more details.

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Ensure that the riving knife and standard insert are installed.
- 3. Mark the width of the dado cut on the workpiece. Include marks on the edge of the workpiece so the cut path can be aligned when the workpiece is lying on the table. Raise the blade up to the desired depth of cut (depth of dado channel desired). When cut-ting deep dadoes, take more than one pass to reduce the risk of kickback.

### 

The danger of kickback increases relative to the depth and width of a cut. Reduce the risk of kickback by making multiple passes to achieve the desired depth of cut. Failure to follow these warnings could result in serious personal injury.

 If dadoing across the workpiece, use the miter gauge to support the workpiece, and align the blade to cut one of the dado sides. DO NOT use the fence in combination with the miter gauge.



5. If dadoing the length of a workpiece, align the blade to cut one of the dado sides as shown in Figure 46.

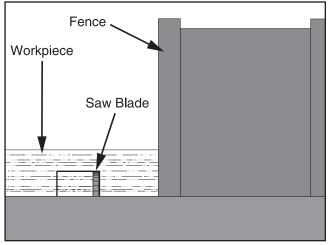


Figure 46. Single-blade dado first cut.

- 6. Reconnect the saw to the power source and turn the saw *ON*. Allow the blade to reach full speed.
- 7. Perform the cutting operation.
- 8. Re-adjust the fence so the blade is aligned with the other edge of the intended dado channel (**Figure 47**).

**Note:** Be sure to keep the cuts within your marks; otherwise, the dado will be too big.

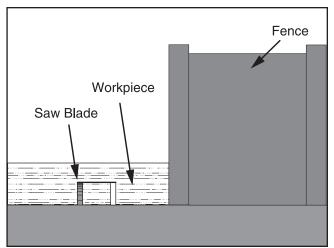


Figure 47. Single-blade dado second cut.

**9.** Continue making cuts toward the center of the dado until the dado is complete.

### **Rabbet Cutting**

### 

You may experience kickback during this procedure. Stand to the side of the blade and wear safety glasses or a face shield to prevent injury when cutting rabbets. Do not put hands behind blade!

Commonly used in furniture joinery, a rabbet is an L-shaped groove cut in the edge of the workpiece. Rabbets can be cut with either a dado blade or a standard saw blade. The optional zero clearance table insert, Model T20645 (see **Page 44**), must be installed during rabbeting operations.

### **Cutting Rabbets with Dado Blade**

**Note:** Rabbet cutting on the edge of the workpiece requires a sacrificial fence attachment, as shown in **Figure 48**.

- 1. DISCONNECT THE SAW FROM POWER!
- **2.** Lower the blade completely, then install the optional zero clearance insert.
- 3. Make the sacrificial fence the same length as the fence and  $\frac{3}{4}$ " thick.
- 4. Attach it to the fence with screws or clamps as shown in **Figure 48**, making sure they are all secure and tight.

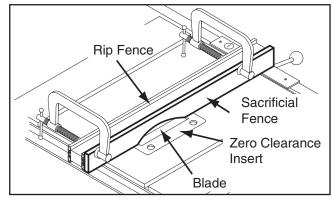


Figure 48. Sacrificial fence.

5. Adjust the fence, turn the saw *ON*, raise the blade into the sacrificial fence to the height needed for the rabbeting operation, and turn the saw *OFF*.





6. DISCONNECT THE SAW FROM POWER!

## 

Always use push sticks, featherboards, push paddles and other safety accessories whenever possible to increase safety and control during operations which require that the blade guard and splitter must be removed from the saw. ALWAYS replace the blade guard after dadoing is complete.

7. Align the workpiece to perform the cutting operation as shown in **Figure 49**.

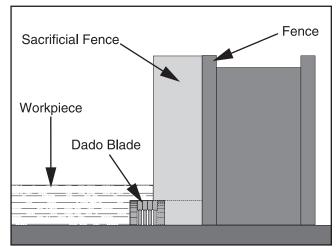


Figure 49. Rabbet cutting.

## WARNING

The danger of kickback increases relative to the depth and width of a cut. Reduce the risk of kickback by making multiple passes to achieve the desired depth of cut. Failure to follow these warnings could result in serious personal injury.

- 8. Reconnect the saw to the power source and turn the saw *ON*.
- **9.** When the blade has reached full speed, perform a test cut with a scrap piece of wood.
- **10.** If the cut is satisfactory, repeat the cut with the final workpiece.

### Cuting Rabbets with Standard Blade

**Note:** Cutting rabbets with a standard saw blade DOES NOT require the use of a sacrificial fence.

**Note:** Reduce motor overloading and blade wear by using a ripping blade. Ripping blades are designed to clear the sawdust quickly.

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Ensure that the riving knife and standard insert are installed.
- **3.** Clearly mark the width of the rabbet cut on the workpiece.

**Note:** Include marks on the edge of the workpiece to clearly identify the intended cut while it is laying flat on the saw table.

4. Raise the blade up to the desired depth of cut (depth of rabbet channel desired). When cutting deep rabbets, take more than one pass to reduce the risk of kickback.

### 

The danger of kickback increases relative to the depth of a cut. Reduce the risk of kickback by making multiple passes to achieve the desired depth of cut. Failure to follow these warnings could result in serious personal injury.

 Adjust the fence so the blade is aligned with the inside of your rabbet channel as shown in Figure 50.

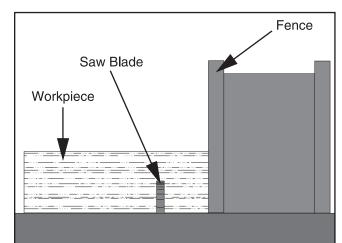


Figure 50. Rabbet cutting with a standard blade.



- 6. Reconnect the saw to the power source and turn the saw *ON*.
- 7. When the blade has reached full speed, perform a test cut with a scrap piece of wood.
- **8.** If the cut is satisfactory, repeat the cut with the final workpiece.
- 9. Stand the workpiece on edge as shown in Figure 51.

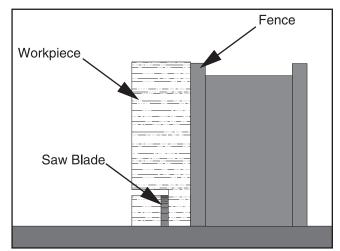


Figure 51. Second cut to create a rabbet.

- **10.** Adjust the saw blade height to intersect with the first cut.
- **11.** Perform the second cut to complete the rabbet.

### Resawing

### 

Resawing on a table saw increases the chances of kickback. Serious injury can be caused by kickback. Kickback is a highspeed expulsion of stock from the tablesaw toward an operator. The operator or bystanders may be struck by flying stock, or the operator's hands can be pulled into the blade during the kickback.

# 

Resawing operations require proper procedures to avoid serious injury. Extra care must be taken to prevent kickback when resawing. Any tilting or movement of the workpiece away from the fence will cause kickback. Be certain that stock is flat and straight. Failure to follow these warnings could result in serious personal injury.

Resawing is the process of cutting a thick piece of stock into one or more thinner pieces. Bandsaws are ideal for resawing and the process is fairly easy and safe. A table saw is not intended for resawing and the process is difficult and extremely dangerous. Resawing on the table saw often binds the blade, causing kickback. The risk of kickback increases relative to the depth of a cut. Kickback is more dangerous when resawing on a table saw because the anti-kickback devices and blade guard must be removed, leaving no protection between your hands and the saw blade. Kickback can pull the operator's hands into the blade, or the operator or bystanders may be hit by flying stock. DO NOT resaw on a table saw without using a resaw barrier. DO NOT resaw on a table saw without wearing a full face shield.

The following instructions describe how to build a resaw barrier, add an auxiliary fence to your standard fence, and more safely perform resawing operations.

**Note:** This table saw can only resaw wood that is less than  $6^{3}/_{8}$ " tall.



#### **Resaw Barrier**

The resaw barrier shown in **Figure 52** holds the workpiece vertical, keeps the workpiece aligned with the fence, and keeps your hands away from the blade.

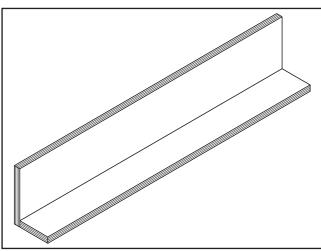


Figure 52. Resawing barrier.

#### Components Needed for the Resaw Barrier:

Hardwood or Plywood <sup>3</sup> / <sub>4</sub> " x 6" x 40 <sup>1</sup> / <sub>4</sub> "	1
Hardwood or Plywood <sup>3</sup> / <sub>4</sub> " x 3" x 40 <sup>1</sup> / <sub>4</sub> "	1
Wood Screws <sup>1</sup> / <sub>4</sub> -20 x 2"	8
Wood GlueAs Nee	ded

#### **Tools Needed for the Resaw Barrier:**

Table Saw	1
Jointer and Planer	Recommended
Clamps	2 Minimum
Drill and Drill Bits	

#### To build the resaw barrier:

 Cut two boards to <sup>3</sup>/<sub>4</sub>" x 6" x 40<sup>1</sup>/<sub>4</sub>" and <sup>3</sup>/<sub>4</sub>" x 3" x 40<sup>1</sup>/<sub>4</sub>". If you are using hardwood, cut the boards oversize, then joint and plane the boards to the correct size to make sure the boards are square and flat.

**Note:** Only use furniture grade plywood or kiln dried hardwood to prevent warping.

2. Pre-drill and countersink 8 holes approximately <sup>3</sup>/<sub>8</sub>" from the bottom of the 6" tall board. **3.** Glue the end of the 3" board, then clamp the boards at a 90° angle with the larger board in the vertical position as shown in **Figure 53**.

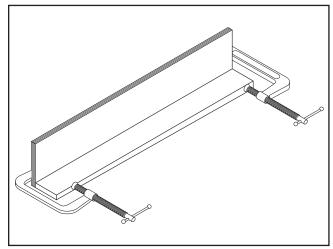


Figure 53. Clamping the resawing barrier.

4. Secure the joint with the wood screws.

#### **Auxiliary Fence**

The auxiliary fence is necessary if you are resawing a workpiece that is taller than it is wide. It should be no less than  $\frac{1}{2}$ " shorter than the board to be resawn.

#### **Components Needed for the Auxiliary Fence:**

Hardwood or Plywood <sup>3</sup>/<sub>4</sub>" x (Height) x 40<sup>1</sup>/<sub>4</sub>".....1 Flat Head Screws M8-1.25 x 25 (Not included).4 Hex Nuts M8-1.25 (Included)......4

#### Tools Needed for the Resaw Barrier:

Table Saw		1
Jointer and Plan	er	Recommended
Clamps		2 Minimum

#### To build the auxiliary fence:

Cut a <sup>3</sup>/<sub>4</sub>" thick board 40<sup>1</sup>/<sub>4</sub>" long, and cut a height no less than <sup>1</sup>/<sub>2</sub>" shorter than the board to be resawn. If you are using hardwood, cut the board oversize, then joint and plane the board to the correct size to make sure the board is square and flat.

**Note:** Only use furniture grade plywood or kiln dried hardwood to prevent warping.



- 2. Pull an end cap off of the standard fence, then remove four hex nuts, flat washers, tbolts and one side of the fence facing from the fence body.
- **3.** Place the auxilliary fence next to the open side of the fence and mark the location of four mounting holes on the auxilliary fence.
- **4.** Pre-drill and countersink four mounting holes on the auxilliary fence.
- 5. Thread the flat head screws through the auxiliary fence and into the hex nuts in the standard fence body, and tighten securely, as shown in **Figure 54**.

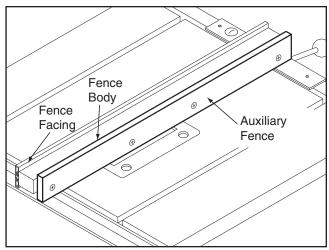


Figure 54. Auxiliary fence.

### **Resawing Operations**

The table saw motor is pushed to its limits when resawing. If the motor starts to bog down, slow down your feed rate. Motor overloading and blade wear can be reduced by using a ripping blade. Ripping blades are designed to clear the sawdust quickly.

#### **Components Needed for Resawing:**

Zero Clearance Insert	1
Ripping Blade 10"	1
Clamps	2
Shop Made Auxiliary Fence	1
Shop Made Resaw Barrier	1

### 

You may experience kickback during this procedure. Stand to the side of the blade and wear a full face shield to prevent injury when resawing.

#### To perform resawing operations:

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Remove the standard table insert and the blade guard/splitter, and install the riving knife. Install a ripping blade and the optional Model T20645 zero clearance table insert. Then lower the blade below the table surface.
- **3.** Attach the auxiliary fence to the standard fence and set it to the desired width.

**Note:** Account for blade kerf, the rough cut made by the blade, and the inaccuracy of the fence scale when the auxiliary fence is installed when figuring out the correct width.

4. Place the workpiece against the auxillary fence and slide the resaw barrier against the workpiece, as shown in Figure 55. Now clamp the resaw barrier to the top of the table saw at both ends.

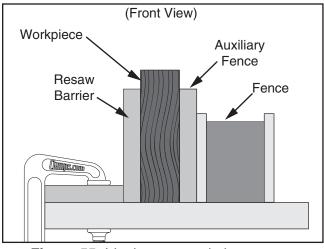


Figure 55. Ideal resaw workpiece setup.



- 5. Slide the workpiece over the blade to make sure it moves smoothly, then remove the workpiece.
- 6. Raise the blade approximately an inch, or close to half the height of the workpiece (**Figure 56**), whichever is less.

### 

The danger of kickback increases relative to the depth of a cut. Reduce the risk of kickback by making multiple passes to achieve the desired depth of cut. Failure to follow these warnings could result in serious personal injury.

# 

Always use push sticks or push paddles to increase safety and control during operations which require that the blade guard and splitter must be removed from the saw. ALWAYS replace the blade guard after resawing is complete.

- **7.** Plug in the table saw, turn it **ON**, and use a push stick to feed the workpiece through the blade using a slow, steady feed rate.
- 8. Flip the workpiece end for end, keeping the same side against the fence, and run the workpiece through the blade.

9. Repeat Steps 6–8 until the blade is close to half of the height of the board to be resawn. The ideal completed resaw cut will leave an ¼" connection when the resawing is complete as shown in Figure 56. Leaving an ¼" connection will reduce the risk of kickback.

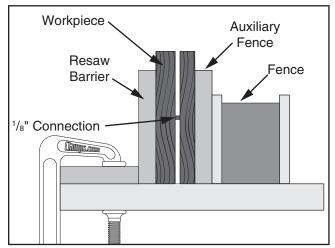


Figure 56. Ideal completed resaw cut.

- **10.** Turn *OFF* the table saw, then separate the parts of the workpiece and hand plane the remaining ridge to remove it.
- **11.** When finished resawing, remove the resaw barrier and auxiliary fence, then re-install the blade guard/splitter or riving knife and standard table insert.



# **SECTION 5: ACCESSORIES**

#### H8085—Front Tool Box for G0651/G0652

This heavy-duty tool box features powder coated paint and ball bearing slides. 25"L x  $22^{1/2}$ "H x 15"D.



#### T20646—Zero Clearance Insert for G0651/ G0652

Made especially for the G0651/G0652 table saw. Height is easily adjustable. Special phenolic material.

#### H7583—Grizzly Tenoning Jig

Our fully adjustable tenoning jig handles stock up to 3<sup>1</sup>/4" thick and features an adjustable bevel angle with a 90° to 75° range. The two large grip handles, adjustable guide bar, multi-position control levers, and extra large clamping handwheel will ensure accurate and repeatable results. A top seller!

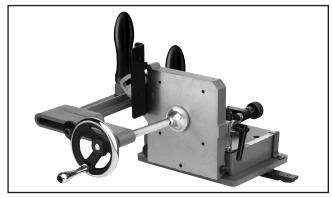


Figure 57. Model H7583 Tenoning Jig.

#### H9587—Table Saw Fundamentals

The table saw is the single tool that turns the hobbyist into a real woodworker, capable of handling a range of challenging jobs. With expert advice, color photos, drawings, and exploded diagrams, Popular Mechanics reveals exactly what this all-important piece of equipment can do. This invaluable and instructive manual covers it all. 192 pages.

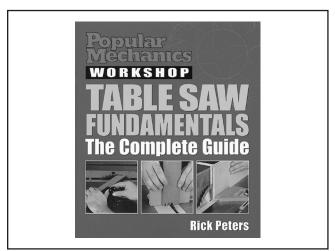


Figure 58. Model H9587 Table Saw Fundamentals guide book.

G5562—SLIPIT<sup>®</sup> 1 Qt. Gel G5563—SLIPIT<sup>®</sup> 12 oz Spray G2871—Boeshield<sup>®</sup> T-9 12 oz Spray G2870—Boeshield<sup>®</sup> T-9 4 oz Spray H3788—G96<sup>®</sup> Gun Treatment 12 oz Spray H3789—G96<sup>®</sup> Gun Treatment 4.5 oz Spray



Figure 59. Recommended products for protecting your cast iron table top.

#### G0638—10HP 3-Ph Cyclone Dust Collector

Our largest Dust Collector features a whopping 4029 CFM capacity and can handle any large duct system with a static pressure loss less than 16.8" of water. Dual collection drums minimize the down time necessary for emptying dust and chips and the noise reducing exhaust manifold keeps the noise level below 87 dB. The ramped air intake is so efficient, there is very little fine dust that makes it to the plastic filter bags and with a 99.9% filter efficiency rating, essentially no dust escapes. The steel stand is included.



Figure 60. G0638 10HP Cyclone Dust Collector.

#### G7581—Superbar™ G7582—Master Plate

The miter slot mounted Superbar<sup>™</sup> will align, tune and calibrate your tablesaw to within ±.001 in just minutes. Replace your tablesaw blade when calibrating the double disk ground Master Plate for a precision measurement, with no runout!

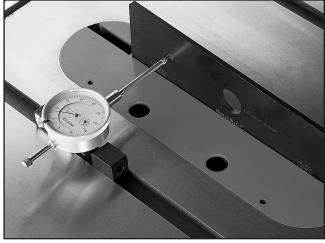


Figure 61. Superbar<sup>™</sup> and Master Plate.

Gall 1-800-523-47777 To Order G0651/G0652 10" Extreme Series Table Saws Carbide-Tipped ATB Circular Saw Blades H9144—10" Ripping Blade, 30T H9145—10" General Purpose, 40T H9146—10" Fine Finishing/Cabinet Work, 60T H9147—10" Cabinet Work/Trimming, 80T H9148—10" Super Fine Work/Trimming, 100T We looked long and hard for a high quality, heavyduty, balanced woodworking saw blade that brings precision into the price range of most woodworkers. Now, for the cost of a construction quality blade, you can enjoy the benefits of a saw blade designed for precision woodworking. Alternate top bevel. 10" diameter, <sup>5</sup>/<sub>8</sub>" arbor.



Figure 62. Carbide-tipped saw blades.

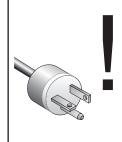
#### G2370—SHOP FOX<sup>®</sup> Board Buddies-Yellow

These unique hold downs only turn in one direction to prevent kickback. Adjustable height, spring loaded wheels are designed to hold your workpiece tight against the table and rip fence and are made of a special composition that will not mark your work.



Figure 63. G2370 SHOP FOX® Board Buddies.

# **SECTION 6: MAINTENANCE**



### 

Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

### Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

#### Daily Check:

- Inspect blades for damage or wear.
- Check for loose mounting bolts/arbor nut.
- Check cords, plugs, and switch for damage.
- Any other condition that could hamper the safe operation of this machine.
- Vacuum dust buildup from inside the cabinet and off of the motor after use.
- Wipe the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

#### Weekly Maintenance:

- Wipe down the table surface and grooves with a lubricant and rust preventive such as SLIPIT<sup>®</sup>.
- Clean the pitch and resin from the saw blade with a cleaner like OxiSolv® Blade & Bit Cleaner.

#### Monthly Check:

• Check the flat belt for damage or wear.

### Cleaning

Cleaning the Model G0651/G0652 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning. We recommend products like G96<sup>®</sup> Gun Treatment, SLIPIT<sup>®</sup>, or Boeshield<sup>®</sup> T-9 (see **Section 5: Accessories** on **Page 44** for more details).

Occasionally it will become necessary to clean the internal parts with more than a vacuum. To do this, remove the table top and clean the internal parts with resin/pitch dissolver or mineral spirits and a stiff wire brush or steel wool. DO NOT USE WATER—WATER WILL CAUSE CAST IRON TO RUST. Make sure the internal workings are dry before using the saw again, so that wood dust will not accumulate. If any essential lubrication is removed during cleaning, re-lubricate those areas.

### Lubrication

Lubricate the areas indicated below every 6–12 months, depending on frequency of use. These areas can be reached through the motor cover opening or the blade opening. Check all adjustments after lubricating.

### Lubricate the following components with multi-purpose grease:

- 1. Trunnion and trunnion slide (where Parts 43 and 44 slide each other, on **Page 64**).
- 2. The worm gear, bevel gears, acme screw and shafts (Parts 52, 55, 61, and 114 on Pages 64 & 67).

**Note:** Using a small brush to apply the grease may be easier than using your fingers.



# **SECTION 7: SERVICE**

Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

### Troubleshooting



#### **Motor & Electrical**

Symptom	Possible Cause	Possible Solution
Machine does not	1. Anti-start safety pin engaged.	1. Remove anti-start safety pin.
start or a breaker trips.	2. Wall fuse/circuit breaker is blown/tripped.	2. Ensure correct size for machine load (refer to <b>Page</b>
	3. Power supply is at fault/switched OFF.	<ul><li>13); replace weak breaker.</li><li>3. Ensure hot lines have correct voltage on all legs and main power supply is switched <i>ON</i>.</li></ul>
	4. Motor ON button or ON/OFF switch is at fault.	4. Replace faulty ON button or ON/OFF switch.
	5. Plug/receptacle is at fault or wired incorrectly.	5. Test for good contacts; correct the wiring.
	6. Start capacitor is at fault (G0651 only).	6. Test/replace if faulty.
	7. Motor connection wired incorrectly.	7. Correct motor wiring connections.
	8. Thermal overload relay has tripped.	<ol> <li>Unplug machine, open magnetic switch cover, turn amperage dial on Thermal Protection Circuit Breaker to a higher amperage setting.</li> </ol>
	9. Contactor not getting energized/has burnt contacts.	<ol> <li>Test for power on all legs and contactor operation. Replace unit if faulty.</li> </ol>
	10. Centrifugal switch is at fault (G0651 only).	10. Adjust/replace the centrifugal switch if available.
	11. Wiring is open/has high resistance.	11. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.
	12. Motor is at fault.	12. Test/repair/replace.
Machine stalls or is	1. Applying too much pressure to workpiece.	1. Use sharp blade, and reduce the feed rate.
underpowered.	2. Run capacitor is at fault (G0651 only).	2. Test/repair/replace.
	3. Belt slipping.	3. Replace bad belt, align pulleys, and re-tension.
	4. Motor connection is wired incorrectly.	4. Correct motor wiring connections.
	5. Plug/receptacle is at fault.	5. Test for good contacts; correct the wiring.
	6. Motor bearings are at fault.	<ol> <li>Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> </ol>
	7. Motor has overheated.	7. Clean off motor, let cool, and reduce workload.
	<ol> <li>Contactor not getting energized or has poor contacts.</li> </ol>	8. Test for power on all legs and contactor operation. Replace if faulty.
	9. Motor is at fault.	9. Test/repair/replace.
	10. Centrifugal switch is at fault (G0651).	10. Adjust/replace centrifugal switch if available.



Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy	1. Motor or component is loose.	<ol> <li>Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.</li> </ol>
operation.	2. Flat belt worn or loose.	<ol> <li>Inspect/replace flat belt with new one (refer to Page 49).</li> </ol>
	3. Motor fan is rubbing on fan cover.	3. Replace dented fan cover; replace loose/damaged fan.
	4. Arbor bearings are at fault.	4. Replace arbor housing bearings; replace arbor.
	5. Arbor pulley is loose.	5. Retighten/replace arbor pulley with shaft and thread locking liquid.
	6. Pulley is loose.	6. Realign/replace shaft, pulley, set screw, and key as required.
	7. Machine sits unevenly on floor.	7. Relocate/shim machine.
	8. Loose arbor nut.	8. Tighten the arbor nut.
	9. Motor bearings are at fault.	<ol> <li>Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> </ol>
	10. Blade is at fault.	10. Replace warped, bent, or twisted blade; resharpen dull blade.
	11. Centrifugal switch at fault (G0651 only).	11. Replace centrifugal switch.

### **Table Saw Operations**

Symptom	Possible Cause	Possible Solution
Blade is not aligned with miter slot or fence.	<ol> <li>Blade is warped.</li> <li>Table top is not parallel to blade.</li> <li>Fence is not parallel to blade.</li> </ol>	<ol> <li>Replace blade (Page 24).</li> <li>Make table parallel to blade (Page 53).</li> <li>Make fence parallel to blade (Page 56).</li> </ol>
Blade does not reach 90°.	<ol> <li>90° stop bolt is out of adjustment.</li> <li>Sawdust loaded up on positive stop.</li> </ol>	<ol> <li>Adjust 90° stop bolt (Page 51).</li> <li>Clean sawdust off positive stop.</li> </ol>
Blade hits insert at 45°.	<ol> <li>45° stop bolt is out of adjustment.</li> <li>Hole in insert is inadequate.</li> <li>Table out of alignment.</li> <li>Blade position is incorrect.</li> </ol>	<ol> <li>Adjust 45° stop bolt (Page 51).</li> <li>File or mill the hole in the insert.</li> <li>Align blade to the table (Page 53).</li> <li>Adjust blade position.</li> </ol>
Board binds or burns when feeding through tablesaw.	<ol> <li>Dull blade.</li> <li>Blade is warped.</li> <li>Fence is not parallel to blade.</li> <li>Table top is not parallel to blade.</li> </ol>	<ol> <li>Replace blade.</li> <li>Replace blade (Page 24).</li> <li>Make fence parallel to blade (Page 56).</li> <li>Make table parallel to blade (Page 53).</li> </ol>
Digital angle gauge not accurate	1. Gearing is at fault.	1. Adjust rack and pinion backlash (Page 52).



### **Replacing Flat Belt**

To ensure optimum power transmission from the motor to the blade, the flat belt must be in good condition. Replace the belt if it becomes cracked, frayed, or glazed.

Qtv

#### Tools Needed

Arbor Wrenches	2
Wood Block 9" Long 4x4	
Wrench or Socket 17mm	1

#### **Removing Flat Belt**

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Raise the motor all the way up, tilt it to 0°, and open the motor cover.
- **3.** Loosen the three motor mounting hex nuts (**Figure 64**) two turns, and place the 4x4 block between the cabinet and bottom of the motor, as shown in **Figure 65**.

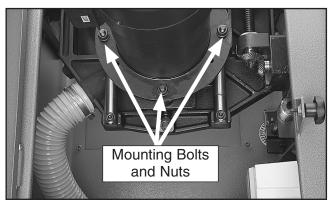


Figure 64. Motor mounting bolts.

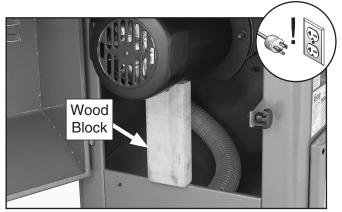


Figure 65. Motor resting on wood block.

 Lower the arbor assembly until the motor rests on the wood block, as shown in Figure 65, to reduce tension on the flat belt.

**Note:** Be careful not to damage the motor, and do not force the arbor down further when it becomes difficult to move the handwheel.

- **5.** Tighten the motor mounting nuts to hold the motor in place.
- 6. Raise the motor all the way up and remove the wood block.
- 7. Roll the belt off of the upper and lower pulleys, as shown in **Figure 66**. Be careful not to pinch your fingers.

**Note:** To make belt removal easier, turn the belt sideways and slide it down and past the back of the motor pulley.

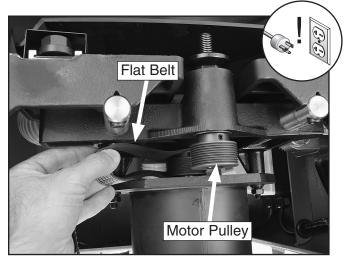


Figure 66. Removing flat belt.



### **Installing New Belt**

1. Turn the flat belt sideways and slip it over the motor pulley, so it engages one or two grooves (**Figure 67**).

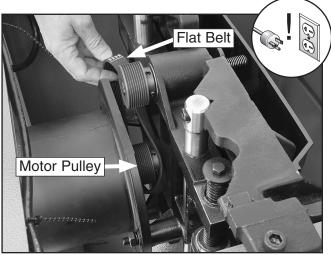


Figure 67. Installing flat belt (table removed for clarity.)

2. Push the belt inward and roll it onto the top pulley. Continue pushing the belt and rotating it up and down (**Figure 68**) until it is centered on both pulleys.

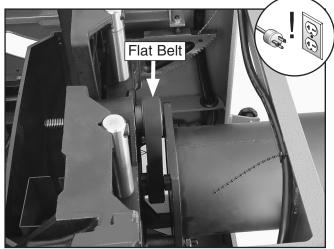


Figure 68. Flat belt installed (table removed for clarity.)

- **3.** Lower the motor all the way down.
- **4.** Loosen the motor mounting hex nuts two turns, then place the wood block on top of the motor.

5. Raise the motor to tension the belt, ensuring that the wood block is between the motor and cabinet, as shown in **Figure 69**.

**Note:** Be careful not to damage the motor, and do not force it up further when it becomes difficult to move the handwheel.

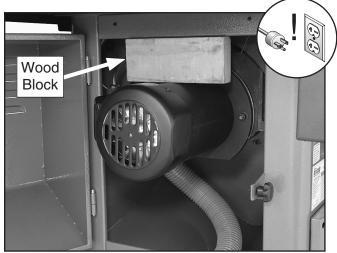


Figure 69. Using wood block to tension belt.

 Check belt deflection, as shown in Figure 70. Adjust deflection by raising or lowering the motor until you can deflect the belt no more than <sup>1</sup>/<sub>8</sub>".

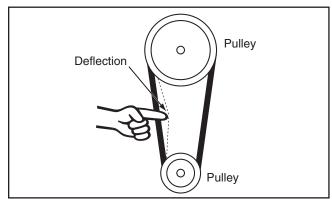
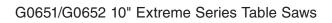


Figure 70. Checking belt deflection.

- **7.** Tighten the motor mounting hex nuts, lower the motor, and remove the wood block.
- 8. Close the motor cover.





### **Blade Tilt Stops**

The table saw features stop bolts that stop the blade exactly at 45° and 90° during blade adjustments. The stops have been set at the factory and should require no adjustments, unless you notice that your cuts are not accurate.

Tools Needed	Qty
90° Square	1
Combo Square	1
Wrench 12 & 13mm	1
Hex Wrench 2.5mm	1

### Setting 90° Stop Bolt

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Position the blade tilt to zero (see indicator on the front of the saw), and raise the blade several inches above the table.
- **3.** Place a machinist's square against the table and blade so it contacts the blade evenly from bottom to top. Make sure a blade tooth does not obstruct the placement of the square.

—If the blade is  $90^{\circ}$  to the table when the stop bolt contacts the underside of the table, go to **To Set the 45° Stop Bolt**.

—If the blade is not  $90^{\circ}$  to the table, you will need to adjust the  $90^{\circ}$  stop bolt; go to **Step 4.** 

- **4.** Tilt the blade to 20° to access the 90° stop bolt on the cabinet.
- 5. Open the motor access cover, loosen the jam nut shown in Figures 71 & 72, adjust the stop bolt up or down, and repeat Steps 2-3 until the stop bolt contacts the handwheel mounting plate when the blade tilt is set to 0°.

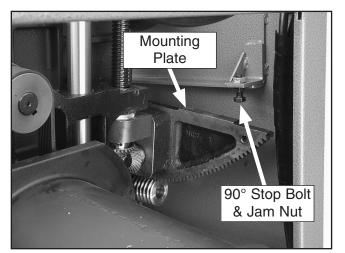


Figure 71. 90° stop bolt and jam nut.

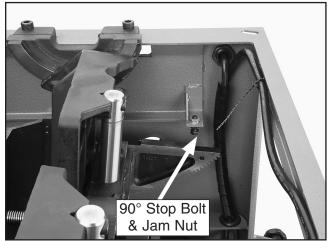


Figure 72. 90° stop bolt and jam nut (table removed for clarity).

6. Tighten the jam nut, then close the motor access cover.

#### Setting 45° Stop Bolt

- 1. Repeat **Steps 1-3** from the previous set of steps using a combo square and the blade tilt set to 45°.
  - —If the blade is 45° to the table when the stop bolt contacts the cabinet, go to **To Adjust** the Tilt Indicator Arrow, on Page 52.
  - -If the blade is not 45° to the table go to **Step 2**.
- **2.** Move the blade angle to 30°, or remove the panel on the right side of the cabinet to access the 45° stop bolt.



**3.** Loosen the jam nut (**Figure 73**) on the 45° stop bolt, adjust the stop bolt in or out, then check to see if the blade is 45° to the table.

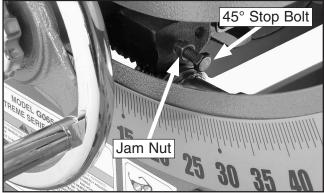


Figure 73. 45° stop bolt and jam nut.

- **4.** Continue adjusting the stop bolt until it contacts the cabinet when the blade is at 45°.
- 5. Tighten the jam nut.

#### **Adjusting Tilt Indicator Arrow**

- 1. Set the 90° stop bolt (see instructions on Page 51).
- 2. Remove the blade height lock knob, loosen the blade height handwheel set screw, then remove the handwheel.
- Loosen the Phillips head screw shown in Figure 74 and move the tip of the indicator to 0°.

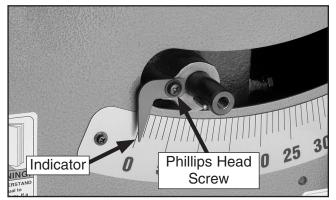


Figure 74. Tilt indicator arrow.

**4.** Tighten the Phillips head screw, and reinstall the handwheel and the lock knob.

### Table Tilt Handwheel Backlash

The table tilt handwheel should move with very little backlash or slop when the saw is new. However, over time the rack and pinion gears controlling the tilt handwheel will wear from use, causing backlash to increase. You can eliminate freeplay by adjusting the tilt handwheel gears.

#### To adjust the table tilt gear backlash:

- 1. DISCONNECT THE SAW FROM POWER!
- 2. Turn the table tilt handwheel one way a couple turns, then turn it the other way to feel the backlash.
- **3.** Unscrew the tap screws securing the angle sensor cover, then remove it to expose the rear rack mounting cap screw.
- Loosen the two rack mounting cap screws and the loosen the jam nut shown in Figure 75.

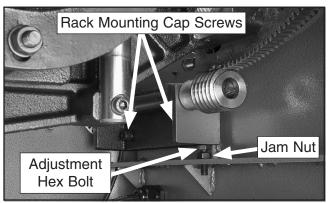


Figure 75. Table tilt handwheel adjustment.

- 4. While a helper tightens the adjustment hex bolt, turn the tilt handwheel back and forth. Tighten the hex bolt enough until you no longer feel any wobble or looseness when the handwheel is initially turned. Do not overtighten the rack-and-pinion gears or they will bind.
- 5. Tighten the jam nut and the rack mounting screws, reinstall the angle sensor cover, then close the motor access cover.



## **Digital Readout**

The digital readout displays the current blade angle. Only set the readout after verifying that the  $90^{\circ}$  and  $45^{\circ}$  blade tilt stops are correctly positioned.

#### To set the digital readout:

- Ensure the power is connected and the 45° and 90° stop bolts are set (see Blade Tilt Stops on Page 51).
- Move the blade angle to 0° and press the 0° SET button (Figure 76) for several seconds until the readout displays 0.00.

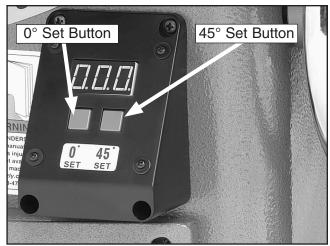


Figure 76. Digital readout.

**3.** Move the blade angle to 45° and press the 45° SET button for several seconds until the readout displays 45.0.

**Note:** If you move the blade angle handwheel when the power is disconnected, the digital readout will be incorrect when the saw is reconnected, and you will need to reset it.

### Miter Slot to Blade Parallelism

Tools Needed	Qty
Adjustable Square	1
Metal Shim Stock A	As Needed
Marker	1

Your table saw will give the best results if the miter slot and the rip fence are adjusted parallel to the blade. If either of these are not exactly parallel, your cuts and your finished work will be lower in quality, but more importantly, the risk of kickback will be increased. Take the time to adjust your table saw properly. A few minutes now will be time well spent.

**Note:** For safest and most accurate adjustments, use a Superbar and Master Plate (see **Figure 61** on **Page 45**).

To adjust the blade parallel to the miter slot:

- 1. DISCONNECT SAW FROM POWER!
- 2. Use an adjustable square to measure the distance from the miter slot to a carbide tip on the blade as shown in **Figure 77.** Make sure that the face of the adjustable square is even along the miter slot.

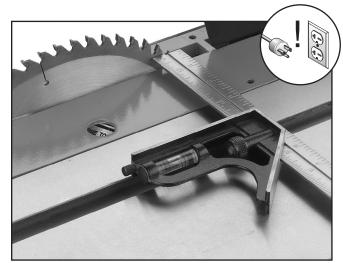


Figure 77. Example of adjusting blade to miter slot.



**3.** With the end of the adjustable square just touching the tip, lock the square in place. Now, mark the carbide tip with a marker where you made this measurement.

### WARNING

The saw blade is dangerously sharp. Use extra care when handling the blade or working near it. Serious injury is possible.

- 4. Rotate that tip to the other end of the table insert.
- 5. Slide the adjustable square down to the other end of the table insert, and compare the distance from the marked blade tip to the end of the adjustable square.
  - -If the blade tip does not touch the end of the adjustable square similar to the first measurement, the table will need to be adjusted.
  - -If the blade tip measurement is the same on both sides, go to **Step 8**.
- 6. To adjust the table, loosen the three bolts in the table mounting locations (see Figure 78) and slightly tap the table. Repeat Steps 2-6 until the blade and miter slot are parallel. Do not forget to tighten the table mounting bolts when finished.

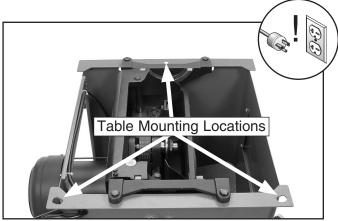


Figure 78. Table mounting bolt holes.

- 7. Tilt the blade to 45° and repeat **Steps 2-5**. If the blade is still parallel to the miter slot, continue on to the **Blade Alignment** procedure. Otherwise, continue with the next step.
- 8. If the blade was parallel to the miter slot at 90° but not at 45°, the table will need to be shimmed with metal shim stock. The shims are placed under the table over each of the three table mounting bolts.
- Refer to Figures 79 and 80 for shim placement. If the distance of A is shorter than B, shim(s) will need to be placed under corners #1 and #2. If the distance of B is shorter than A, shim(s) will need to be placed under corner #3. Very thin shim stock works well.

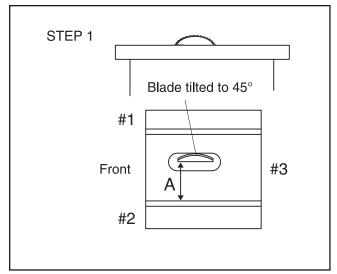


Figure 79. Shim procedure diagram A.

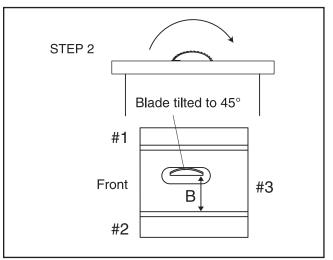


Figure 80. Shim procedure diagram B.



- **10.** Tighten down one bolt a small amount and then move on to each of the others, tightening each down the same amount. Continue to rotate through the bolts, tightening them a little each time until they are all secure.
- Now recheck the blade to miter slot at 90° and 45° by repeating Steps 2-6. If the distance of A and B are equal, continue to the Blade Alignment procedure. If the distances are still off, repeat Steps 9-11.
- 12. Once you feel you have the miter slot adjusted to the blade, recheck all measurements and be sure the table mounting bolts are secure. Also, if you ever remove the table in the future, be sure to make note of shim placements and reassemble exactly how it came apart.

### **Blade Alignment**

If the blade contacts the table insert when raised or tilted, the blade must be aligned by moving the table.

Tools Needed	Qty
Wrench 14mm	1

To adjust the blade alignment by moving the table:

- 1. DISCONNECT THE SAW FROM POWER!
- Loosen the three table mounting bolts (Page 54, Figure 78) and adjust the table until the blade does not contact the insert. Tighten all the mounting bolts.
- Make sure the blade does not contact the table insert when raised or tilted. Recheck parallelism of the blade to the miter slot (see Page 53). Adjust as necessary until the blade does not touch the insert.

### **Adjusting Fence**

The rip fence included with your Model G0651/ G0652 Table Saw is designed to provide excellent ripping accuracy when properly adjusted. There are four main adjustments: square, height, parallelism, and clamping pressure. Keep in mind that these adjustments are interconnected and some trial-and-error may be needed to achieve satisfactory results.

Tools Needed	Qty
Hex Wrench 4mm	1
Hex Wrench 6mm	1
Machinist Square	1

#### **Square and Height**

Adjust the the nylon screws (**Figure 81**) on top of the fence bracket with a 6mm hex wrench to set the fence square with the blade and set the fence height above the table.

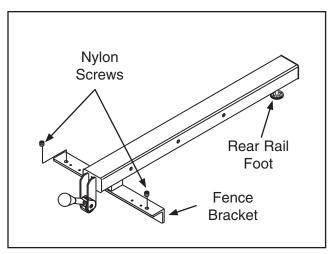


Figure 81. Nylon adjustment screws.

Place a machinist's square on the table against the side of the fence. If the square does not remain flush against both the fence and the table, adjust the nylon screws until the fence and table are square.

If the bottom surface of the fence is more than 1/16" above the table at the front or back, adjust the fence height using the nylon screws and the rear rail foot (**Figure 81**).



### **Clamping Pressure and Parallelism**

The fence clamping mechanism adjusts the clamping pressure the right amount to hold your fence securely and position the fence parallel to the miter slot.

Remove the fence and, using a 4mm hex wrench, adjust the set screws shown in **Figure 82** equally on the rear side of the front bracket.

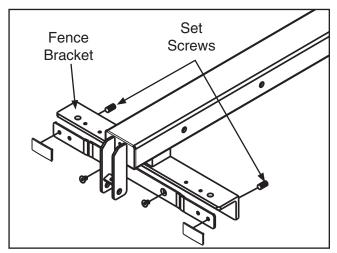


Figure 82. Set screw adjustments.

Place the fence alongside the miter slot (**Figure 83**), and check the fence to miter slot parallelism. Also, check the fence clamping strength by pushing and pulling the fence with moderate pressure by hand.



Figure 83. Example of fence aligned parallel to miter slot.

Trial-and-error will be needed to adjust the set screws so the fence is parallel to the miter slot and the clamping pressure is sufficient.

**Optional**: If you are cutting wet or green stock, offsetting the rear of the fence 1/64" from the blade by using the set screws in **Figure 82** can help prevent the workpiece from binding and burning.



### **Miter Gauge**

Tools Needed	Qty
Hex Wrench 2.5mm	1
Phillips Head Screwdriver	1
Machinist Square	1
Adjustable Square	1
Wrench 8mm	1

To adjust the miter gauge so it is perpendicular to the saw blade:

- 1. Slide the miter gauge into the miter gauge slot to the left of the blade.
- 2. Push in the shaft (Figure 84).

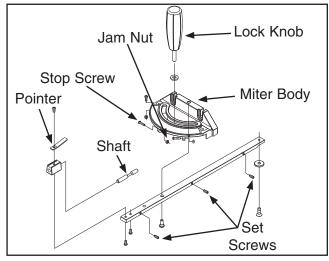


Figure 84. Miter gauge diagram.

**3.** Loosen the lock knob on the miter gauge and place a square against the face of the miter body and the blade.

- **4.** Adjust the miter body until the pointer is at 0° and there is no space between the square and the blade, then tighten the lock knob.
- Loosen the jam nut and adjust the stop screw until it is seated against the shaft (see Figure 84 for part locations), then tighten the jam nut.
- **6** Loosen the screw on the front of the miter bar, adjust the pointer to 0°, then tighten the screw.
- **7.** To adjust to 45°, follow **Steps 1-5** using an adjustable square set to 45°.
- **8.** Double-check your adjustments at 45° and 90° to assure that you have accurately set your miter gauge.
- 9. To adjust the sliding resistance of the miter bar in the miter slot, turn the adjustment set screws shown in **Figure 84** clockwise in small increments, and test fit between adjustments until the miter gauge fits your expectations.



# **SECTION 8: WIRING**

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this diagram carefully. If you notice differences between your machine and these wiring diagrams, call Technical Support at (570) 546-9663 for assistance.

# AWARNING Electrical Safety Instructions

- 1. **PRINTED INFORMATION.** The electrical information included in this section is current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical system of future machines. Study the photos and diagrams in this section carefully. If you notice differences between your machine and these diagrams, call Technical Support at (570) 546-9663 for assistance.
- 2. SHOCK HAZARD. Disconnect the power from the machine before servicing electrical components. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death.
- 3. CIRCUIT REQUIREMENTS. You MUST follow the CIRCUIT REQUIREMENTS section on Page 13. If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.

- 4. GROUNDED CIRCUIT. Electrocution or fire could result if the machine is not grounded and installed in compliance with electrical codes. Compliance MUST be verified by a qualified electrician.
- 5. MOTOR WIRING. The motor wiring shown in these diagrams are current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.
- 6. EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

### NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at *www.grizzly.com*.



### G0651/G0652 Electrical Components



Figure 85. G0651 motor junction box.

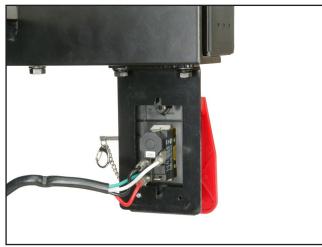


Figure 86. G0651/G0652 switch.



Figure 87. G0651 capacitors.

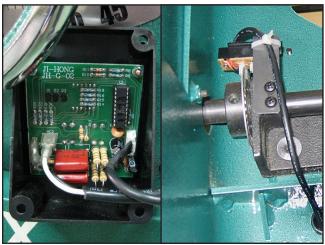


Figure 88. G0651/G0652 digital readout and angle sensor.

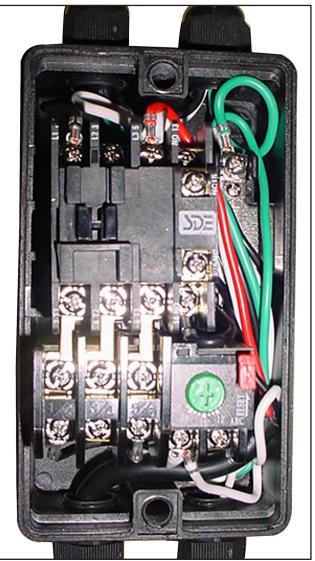
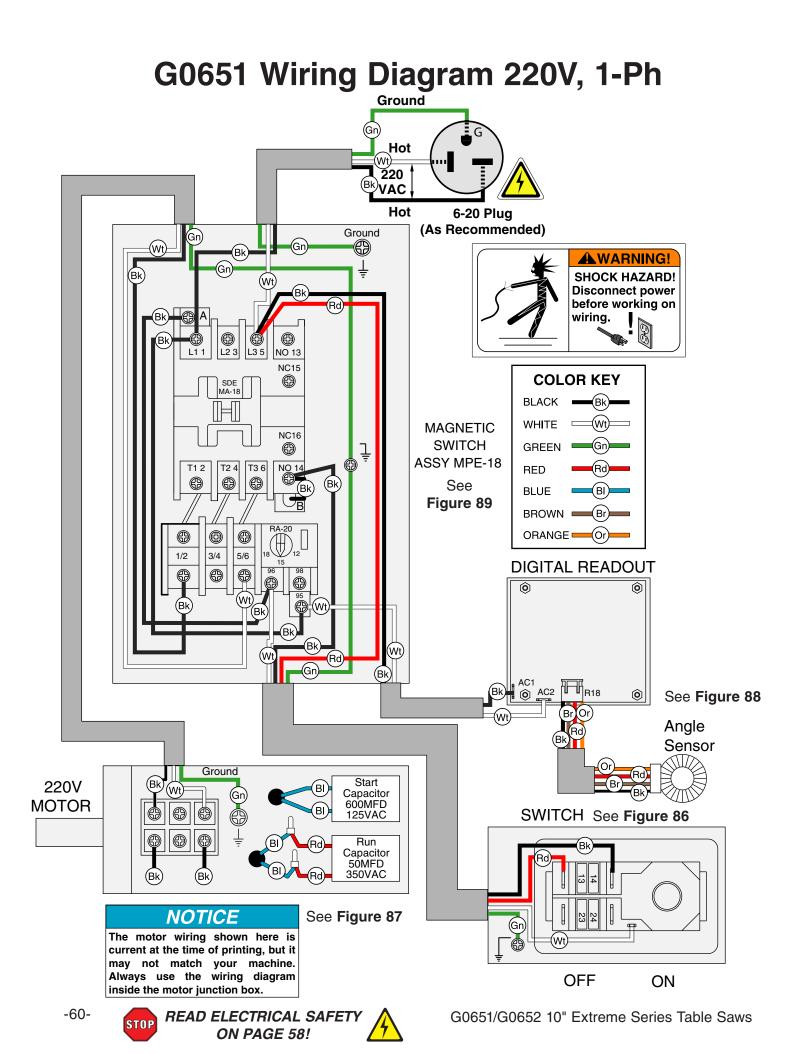


Figure 89. G0651 magnetic switch.

ON PAGE 58!

STOP

-59-



### **G0652 Electrical Components**



Figure 90. G0652 magnetic switch prewired to 220V, 3-phase.

Note: The thermal relay in Figure 90 is set for 14 amp, 220V, 3-phase operation.

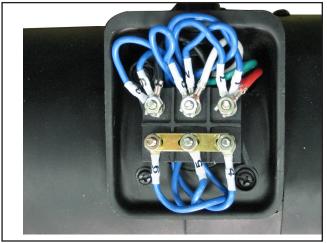


Figure 91. G0652 motor junction box wired for 220V.



Figure 92. G0652 magnetic switch converted to 440V, 3-phase.

Note: The therrmal relay in Figure 92 is adjusted for 7 amp, 440V, 3-phase operation.

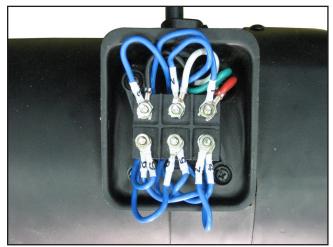
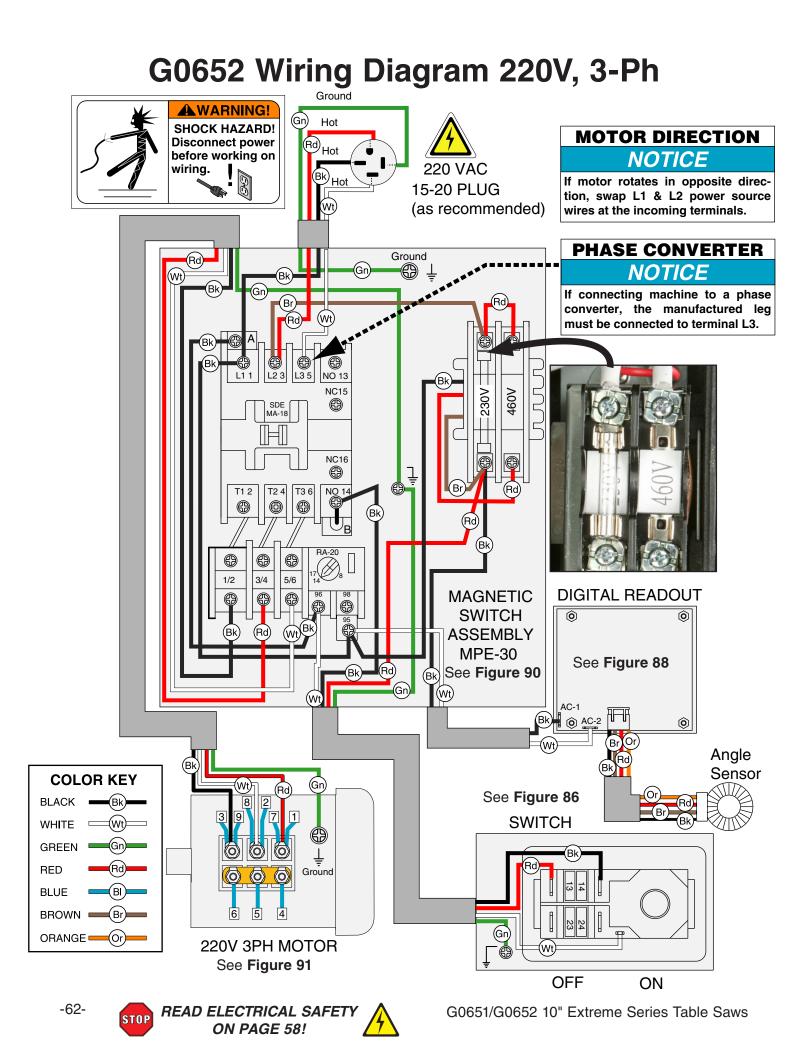
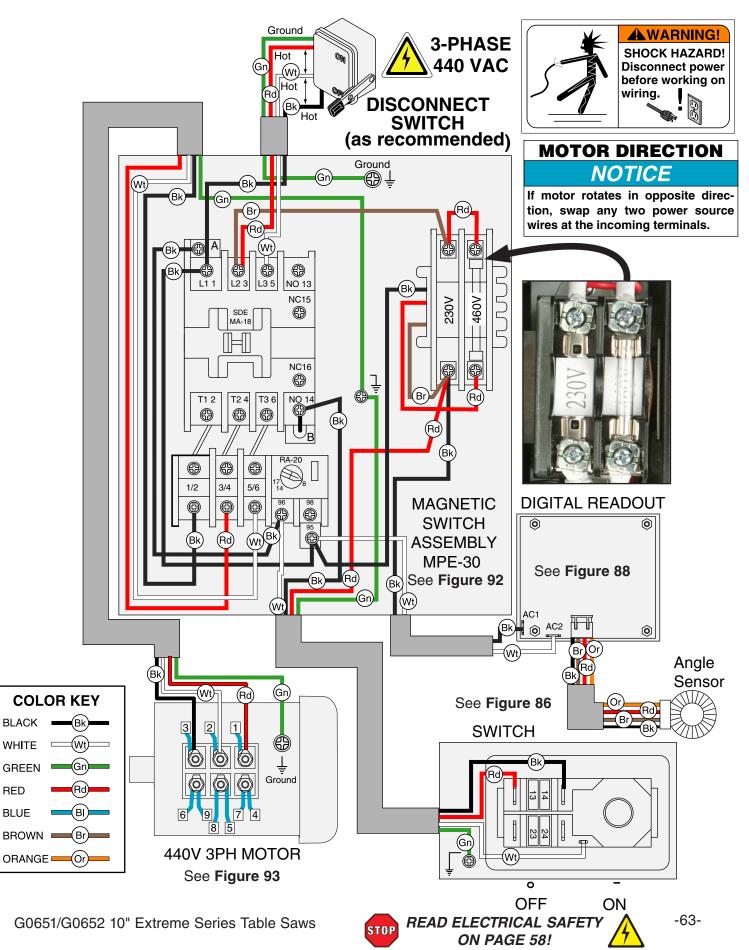


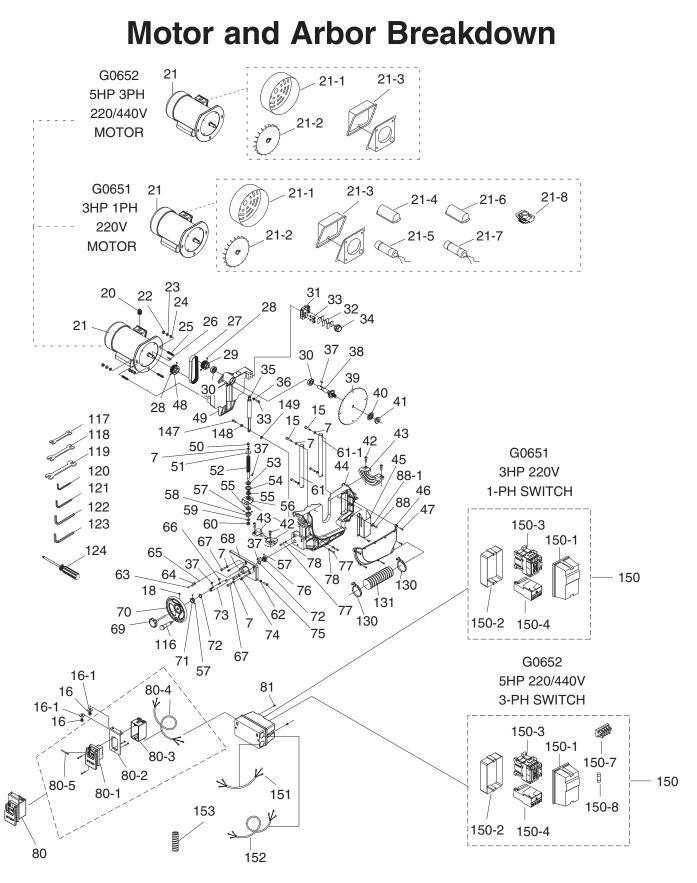
Figure 93. G0652 motor junction box wired for 440V.

ON PAGE 58!



### G0652 Wiring Diagram 440V, 3-Ph





# Motor and Arbor Parts List

REF	PART #	DESCRIPTION
7	PLW04M	LOCK WASHER 8MM
15	PSB40M	CAP SCREW M8-1.25 X 35
16	PB06M	HEX BOLT M8-1.25 X 12
16-1	PW01M	FLAT WASHER 8MM
20	P0651020	STRAIN RELIEF PGA 16-14B
22	PN02M	HEX NUT M10-1.5
23	PLW06M	LOCK WASHER 10MM
24	PW04M	FLAT WASHER 10MM
25	P0651025	SPECIAL MOTOR BOLT
26	PK12M	KEY 5 X 5 X 30
27	P0651027	FLAT BELT 180J-9
28	PSS03M	SET SCREW M6-1 X 8
29	P0651029	PULLEY
30	P6204-2RS	BALL BEARING 6204-2RS
31	P0651031	CLAMPING BRACKET
32	P0651032	ADJUSTING PLATE
33	PSB11M	CAP SCREW M8-1.25 X 16
34	P0651034	SPECIAL BOLT
35	P0651035	STICK
36	P0651036	BUSHING
37	PK14M	KEY 5 X 5 X 18
38	P0651038	ARBOR SHAFT
39	P0651039	BLADE 10" X 40T
40	P0651040	ARBOR FLANGE
41	P0651041	ARBOR NUT
42	PSB72M	CAP SCREW M10-1.5 X 30
43	P0651043	TRUNNION SLIDE
44	P0651044	TRUNNION
45	P0651045	BELT COVER PLATE
46	P0651046	DUST CHUTE
47	PS06M	PHLP HD SCR M58 X 20
48	P0651048	MOTOR PULLEY
49	P0651049	BRACKET
50	PB03M	HEX BOLT M8-1.25 X 16
51	PW01M	FLAT WASHER 8MM
52	P0651052	LEAD SCREW
53	P0651053	BUSHING
54	P0651054	GASKET
55	P51102	THRUST BEARING 51102
56	P0651056	LEAD SCREW BRACKET
57	PSS07M	SET SCREW M58 X 5
58	P0651058	BEVEL GEAR (L)
59	PW04M	FLAT WASHER 10MM
60	PLN10M	LOCK NUT M10-1.25
61	P0651061	SUPPORT (L)
-		- 、/

REF	PART #	DESCRIPTION
61-1	P0651061-1	SUPPORT (R)
62	PN03M	HEX NUT M8-1.25
63	PS14M	PHLP HD SCR M6-1 X 12
64	P0651064	TILT ARROW POINTER
65	PTLW05M	EXT TOOTH WASHER 6MM
66	PK14M	KEY 5 X 5 X 18
67	PSB31M	CAP SCREW M8-1.25 X 25
68	P0651068	HEIGHT HANDWHEEL MOUNTING PLATE
69	P0651069	LOCK KNOB
70	P0651070	HANDWHEEL
71	P0651071	LOCK COLLAR
72	P0651072	FLAT WASHER 19MM
73	P0651073	BLADE HEIGHT HANDWHEEL SHAFT
74	P0651074	ALIGNMENT PIN
75	PB20M	HEX BOLT M8-1.25 X 35
76	P0651076	BEVEL GEAR (R)
77	PSB06M	CAP SCREW M6-1 X 25
78	PLW03M	LOCK WASHER 6MM
80	P0651080	ON/OFF SWITCH ASSEMBLY
80-1	P0651080-1	ON/OFF PUSH BUTTON SWITCH
80-2	P0651080-2	ON/OFF SWITCH BRACKET
80-3	P0651080-3	ON/OFF SWITCH BOX
80-4	P0651080-4	ON/OFF SWICH CORD 16AWG X 4C
80-5	P0651080-5	SAFETY PIN
81	P0651081	NYLON SCREW 3/16-24 X 1/2
88	PSB115M	BUTTON HD CAP SCR M6-1 X 16
88-1	PW03M	FLAT WASHER 6MM
116	P0651116	HANDWHEEL HANDLE
117	PWR810	WRENCH 8 X 10
118	PWR1113	WRENCH 11 X 13
119	PWR1417	WRENCH 14 X 17
120	PAW03M	HEX WRENCH 3MM
121	PAW04M	HEX WRENCH 4MM
122	PAW05M	HEX WRENCH 5MM
123	PAW06M	HEX WRENCH 6MM
124	P0651124	SCREWDRIVER PHLP/FLAT HEAD #1
130	P0651130	BODY
131	P0651131	DUST CHUTE HOSE 64 X 1000MM
147	P0651147	SPECIAL SCREW
148	P0651148	WAVE WASHER
149	PW04M	FLAT WASHER 10MM
151	P0651151	MOTOR CORD 14AWG X 4C
152	P0651152	POWER CORD 14AWG X 4C
153	P0651153	WIRE PROTECTOR 16 X 20 X 300MM

#### G0651 3HP, 220V, SINGLE-PHASE MOTOR

21	P0651021	MOTOR 3HP, 1 PHASE
21-1	P0651021-1	MOTOR FAN COVER
21-2	P0651021-2	MOTOR FAN
21-3	P0651021-3	JUNCTION BOX
21-4	P0651021-4	RUN CAPACITOR COVER
21-5	P0651021-5	R CAP 50M 350V 1-3/4 X 3-3/8
21-6	P0651021-6	S CAP COVER
21-7	P0651021-7	S. CAP 600M 125V 1-3/4 X 3-3/8
21-8	P0651021-8	CENTRIFUGAL SWITCH

#### G0652 35P, 220V/440V, THREE-PHASE MOTOR

21	P0652021	MOTOR 5HP, 3 PHASE
21-1	P0652021-1	MOTOR FAN COVER
21-2	P0652021-2	MOTOR FAN
21-3	P0652021-3	JUNCTION BOX



### **Motor and Arbor Parts List Continued**

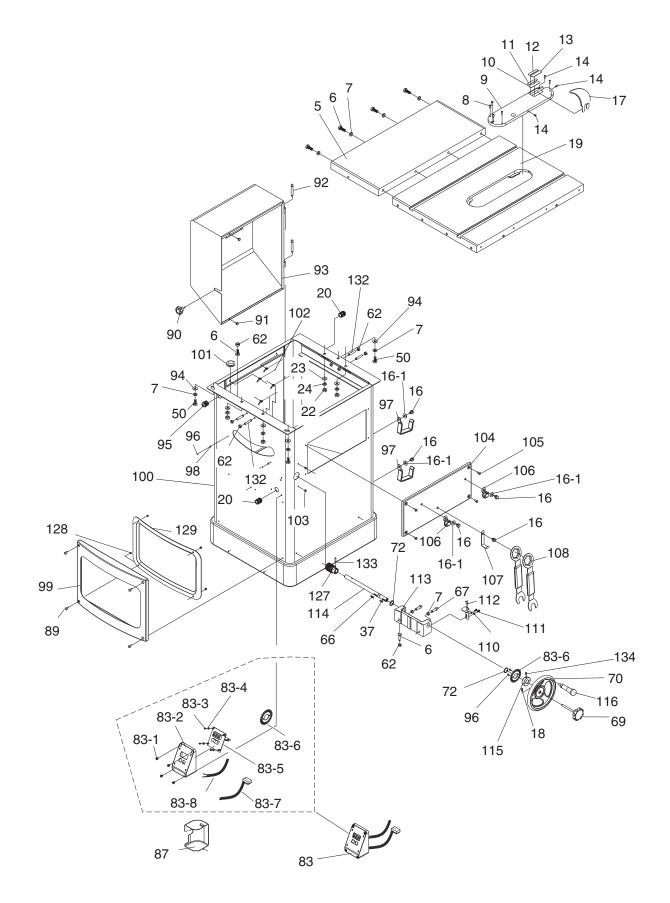
G0651 3HP, 220V, 1-PHASE SWITCH				
150	P0651150	MAGNETIC SWITCH 3HP-1PH, 13A		
150-1	P0651150-1	MAG SWITCH FRONT COVER		
150-2	P0651150-2	MAG SWITCH BACK COVER		
150-3	P0651150-3	CONTACTOR SDE MA-18 220V		
150-4	P0651150-4	OL RELAY SDE RA-20 12-18		

#### G0652 5HP, 220V/440V, 3-PH SWITCH

150	P0652150	MAGNETIC SWITCH 5HP-3PH, 12A
150-1	P0652150-1	MAG SWITCH FRONT COVER
150-2	P0652150-2	MAG SWITCH BACK COVER
150-3	P0652150-3	CONTACTOR SDE MA-18 220V
150-4	P0652150-4	OL RELAY SDE RA-20 7-17
150-7	P0652150-7	TRANSFORMER
150-8	P0652150-8	FUSE



### **Cabinet Breakdown**



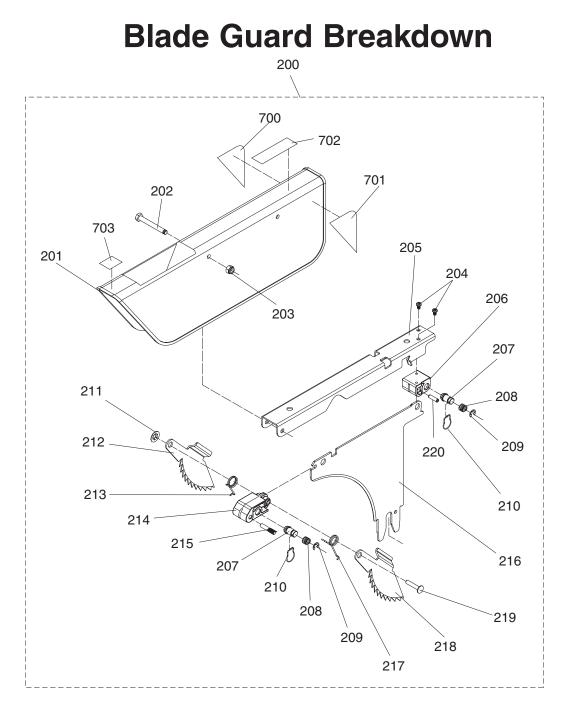


### **Cabinet Parts List**

REF	PART #	DESCRIPTION
5	P0651005	EXTENSION WING
6	PB07M	HEX BOLT M8-1.25 X 25
7	PLW04M	LOCK WASHER 8MM
8	PFH54M	FLAT HD SCR M58 X 20
9	P0651009	TABLE INSERT
10	P0651010	TAPE (L)
11	P0651011	TAPE (R)
12	P0651012	PLATE (L)
13	P0651013	PLATE (R)
14	PSS04M	SET SCREW M6-1 X 12
16	PB06M	HEX BOLT M8-1.25 X 12
16-1	PW01M	FLAT WASHER 8MM
17	P0651017	SPLITTER
18	PSS01M	SET SCREW M6-1 X 10
19	P0651019	TABLE
20	P0651020	STRAIN RELIEF PGA 16-14B
22	PN02M	HEX NUT M10-1.5
23	PLW06M	LOCK WASHER 10MM
24	PW04M	FLAT WASHER 10MM
37	PK14M	KEY 5 X 5 X 18
50	PB03M	HEX BOLT M8-1.25 X 16
62	PN03M	HEX NUT M8-1.25
66	PK14M	KEY 5 X 5 X 18
67	PSB31M	CAP SCREW M8-1.25 X 25
69	P0651069	LOCK KNOB
70	P0651070	HANDWHEEL
72	P0651072	FLAT WASHER 19MM
83	P0651083	DIGITAL SENSOR ASSEMBLY
83-1	PS05M	PHLP HD SCR M58 X 8
83-2	P0651083-2	DIGITAL READOUT COVER
83-3	PS79M	PHLP HD SCR M35 X 8
83-4	PW07M	FLAT WASHER 3MM
83-5	P0651083-5	CIRCUIT BOARD
83-6	P0651083-6	SENSOR PLATE
83-7	P0651083-7	DATA CORD 24 AWG X 450

REF	PART #	DESCRIPTION
83-8	P0651083-8	DIGITAL READOUT CORD 18 AWG X 2C
87	P0651087	COVER
89	PSB26M	CAP SCREW M6-1 X 12
90	P0651090	LOCK KNOB M6-1 X 20
91	P0651091	RUBBER BUMPER
92	P0651092	ALIGNMENT PIN 8 X 54
93	P0651093	MOTOR ACCESS COVER
94	PW01M	FLAT WASHER 8MM
95	P0651095	STRAIN RELIEF PGA 13.5-11B
96	PS17M	PHLP HD SCR M47 X 6
97	P0651097	FENCE MOUNTING BRACKET
98	PW05M	FLAT WASHER 4MM
99	P0651099	FRONT COVER
100	P0651100	CABINET
101	P0651101	STRAIN RELIEF
102	P0651102	CHAIN
103	PHTEK5M	TAP SCREW M4 X 12
104	P0651104	RIGHT COVER
105	PFH06M	FLAT HD SCR M6-1 X 20
106	P0651106	MITER GAUGE MOUNTING BRACKET
107	P0651107	WRENCH MOUNTING BRACKET
108	P0651108	ARBOR WRENCH
110	PW02M	FLAT WASHER 5MM
111	PB96M	HEX BOLT M58 X 10
112	P0651112	L-PLATE
113	P0651113	BLADE TILT SHAFT BRACKET
114	P0651114	BLADE TILT SHAFT
115	P0651115	SPECIAL RING
116	P0651116	HANDWHEEL HANDLE
127	P0651127	SHAFT
128	PN06M	HEX NUT M58
129	P0651129	PLATE
132	PSS42M	SET SCREW M8-1.25 X 50
133	P0651133	ALIGNMENT PIN 5 X 28
134	PSS16M	SET SCREW M8-1.25 X 10

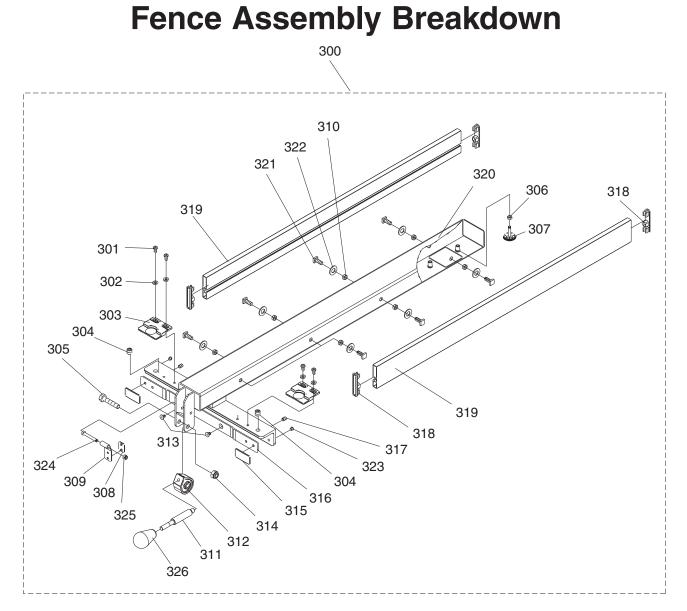




REF	PART #	DESCRIPTION	REI
200	P0651200	BLADE GUARD ASSEMBLY	213
201	P0651201	BLADE GUARD	214
202	PB39M	HEX BOLT M6-1 X 50	215
203	PLN03M	LOCK NUT M6-1	216
204	PS17M	PHLP HD SCR M47 X 6	217
205	P0651205	SPINE	218
206	P0651206	BRACKET	219
207	P0651207	SHAFT	220
208	P0651208	TORSION SPRING	700
209	PEC10M	E-CLIP 9MM	701
210	P0651210	SPECIAL RING	702
211	PEC02M	E-CLIP 4MM	703
212	P0651212	PAWL (L)	

REF	PART #	DESCRIPTION
213	P0651213	TORSION SPRING (R)
214	P0651214	SPLITTER BRACKET
215	P0651215	ALIGNMENT PIN
216	P0651216	SPLITTER
217	P0651217	TORSION SPRING (L)
218	P0651218	PAWL (R)
219	P0651219	HINGE PIN
220	P0651220	SPECIAL PIN 4 X 16
700	P0651700	GUARD AND ANTI-KICK BACK LABEL
701	P0651701	DISC PWR-BLADE LABEL
702	P0651702	BLADE GUARD WARNING LABEL
703	P0651703	BLADE CONTACT WARNING LABEL

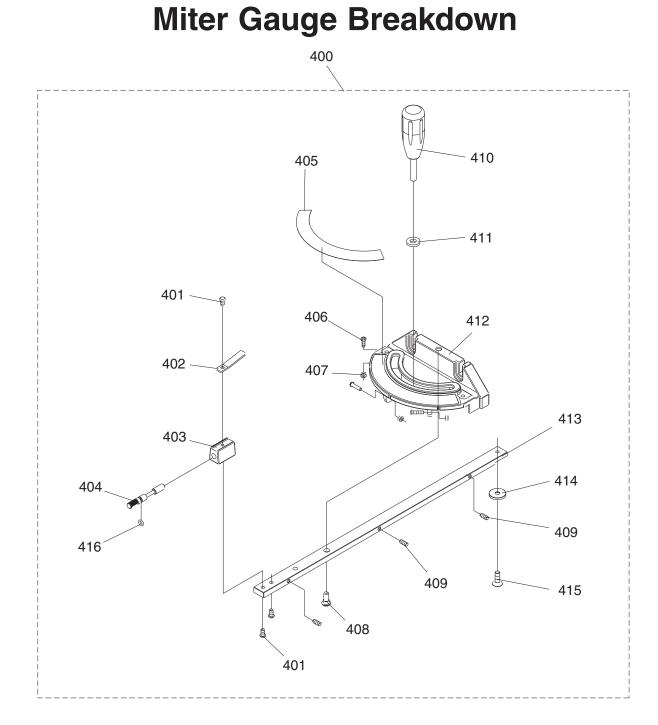




REF	PART #	DESCRIPTION
300	P0651300	FENCE ASSEMBLY
301	PS14M	PHLP HD SCR M6-1 X 12
302	PW03M	FLAT WASHER 6MM
303	P0651303	INDICATOR PLATE
304	P0651304	PLASTIC SET SCREW M12-1.75 X 13
305	PB73M	HEX BOLT M10-1.5 X 50
306	PN01M	HEX NUT M6-1
307	P0651307	REAR RAIL FOOT
308	P0651308	FRONT PLATE
309	P0651309	FRONT BRACKET
310	PN03M	HEX NUT M8-1.25
311	P0651311	FENCE HANDLE SHAFT
312	P0651312	САМ
313	PFH04M	FLAT HD SCR M6-1 X 8

REF	PART #	DESCRIPTION
314	PLN05M	LOCK NUT M10-1.5
315	P0651315	PLASTIC PAD
316	P0651316	CLAMPING BRACKET
317	PSS20M	SET SCREW M8-1.25 X 8
318	P0651318	PLATE CAP
319	P0651319	FENCE PLATE
320	P0651320	FENCE
321	P0651321	T-BOLT M8-1.25 X 20
322	PW01M	FLAT WASHER 8MM
323	P0651323	PLASTIC BUMPER
324	PB71M	HEX BOLT M6-1 X 45
325	PLN03M	LOCK NUT M6-1
326	P0651326	FENCE LOCK HANDLE





REF	PART #	DESCRIPTION
400	P0651400	MITER GAUGE ASSEMBLY
401	PS06	PHLP HD SCR 10-24 X 3/8
402	P0651402	POINTER
403	P0651403	BLOCK
404	P0651404	SHAFT
405	P0651405	MITER GAUGE SCALE
406	PS25	PHLP HD SCR 8-32 X 5/8
407	PN14	HEX NUT 8-32
408	PS04	PHLP HD SCR 1/4-20 X 1/2

#### REF PART # DESCRIPTION

409	P0651409	SPECIAL SET SCREW M58 X 12	
410	P0651410	MITER GAUGE HANDLE	
411	PW01M	FLAT WASHER 8MM	
412	P0651412	MITER GAUGE	
413	P0651413	PLATE	
414	P0651414	GUIDE PLATE	
415	PFH9M	FLAT HD SCR M6-1 X 6	
416	PORP005	O-RING 4.8 X 1.9 P5	



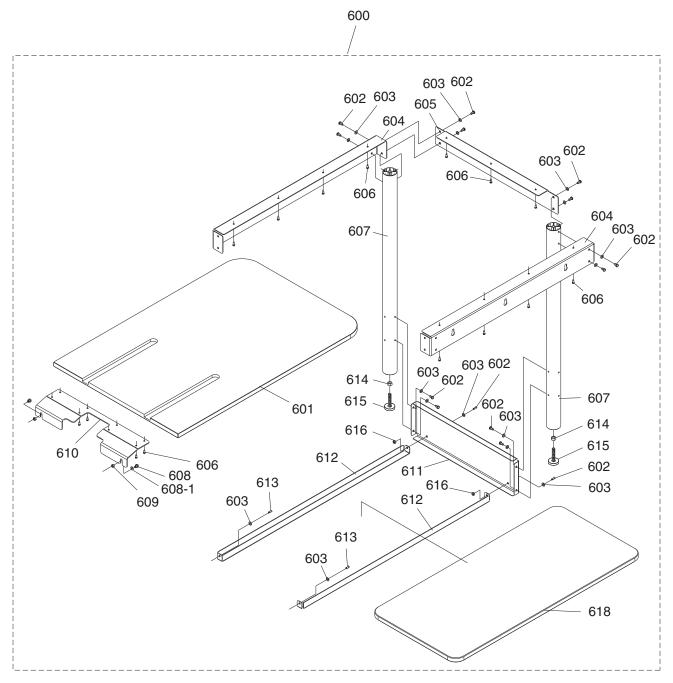
#### **Extension Table Breakdown** Server and a server and a server a se 514-1 518 507 <sup>529</sup>511 506 -507 515 50 508 519 529<sub>504</sub> M 529 508 512<sup>513</sup> 513 512 500 -513 525 512 513 521 513

DEE	PART #	DESCRIPTION
500	P0651500	EXTENSION TABLE ASSEMBLY
501	P0651501	LEFT SCALE 18"
502	P0651502	RIGHT SCALE 52"
503	P0651503	EXTENSION TABLE PLATE
504	P0651504	EXTENSION TABLE SUPPORT
505	P0651505	FRONT EXTENSION BRACKET
506	P0651506	MOUNTING PLATE
507	PFH21M	FLAT HD SCR M8-1.25 X 25
508	PN03M	HEX NUT M8-1.25
509	PSB31M	CAP SCREW M8-1.25 X 25
510	P0651510	REAR RAIL 79" LONG
511	PLW04M	LOCK WASHER 8MM
512	PS14M	PHLP HD SCR M6-1 X 12
513	PW03M	FLAT WASHER 6MM
514	PB06M	HEX BOLT M8-1.25 X 12
514-1	PW01M	FLAT WASHER 8MM

REF	PART #	DESCRIPTION
515	PHTEK8M	TAP SCREW M4 X 20
516	P0651516	RIGHT EXTENSION BRACKET
517	P0651517	FRONT RAIL (91-1/2" LONG)
518	P0651518	FENCE TUBE (91-1/2" LONG)
519	P0651519	END CAP
520	PN01M	HEX NUT M6-1
521	P0651521	SHELF END PLATE
522	P0651522	SUPPORT LEG
523	PN08	HEX NUT 3/8-16
524	P0651524	FOOT
525	PB02M	HEX BOLT M6-1 X 12
526	P0651526	LOWER SHELF BRACKET
527	PW01M	FLAT WASHER 8MM
528	PB06M	HEX BOLT M8-1.25 X 12
529	PW01M	FLAT WASHER 8MM
530	P0651530	LOWER SHELF



### **Outfeed Table Breakdown**

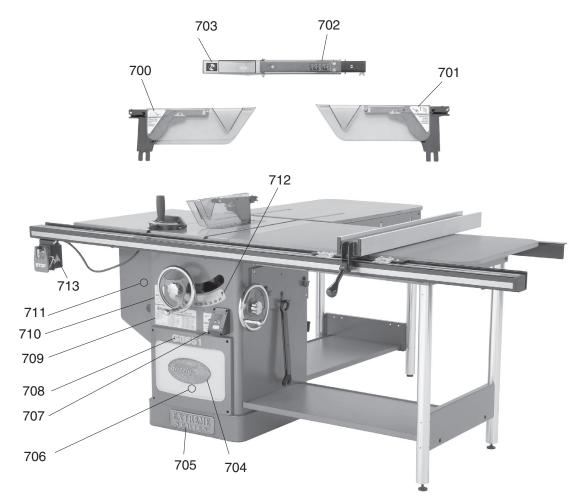


REF	PART #	DESCRIPTION
600	P0651600	OUTFEED TABLE ASSEMBLY
601	P0651601	OUTFEED TABLE PLATE
602	PS14M	PHLP HD SCR M6-1 X 12
603	PW03M	FLAT WASHER 6MM
604	P0651604	OUTFEED TABLE SUPPORT
605	P0651605	OUTFEED TABLE BRACKET
606	PHTEK8M	TAP SCREW M4 X 20
607	P0651607	SUPPORT LEG
608	PB03M	HEX BOLT M8-1.25 X 16
608-1	PW01M	FLAT WASHER 8MM

REF	PART #	DESCRIPTION
609	PN03M	HEX NUT M8-1.25
610	P0651610	FRONT OUTFEED TABLE BRACKET
611	P0651611	SHELF END PLATE
612	P0651612	LOWER SHELF BRACKET
613	PB02M	HEX BOLT M6-1 X 12
614	PN08	HEX NUT 3/8-16
615	P0651615	FOOT
616	PN01M	HEX NUT M6-1
618	P0651618	LOWER SHELF



### Label Placement



REF	PART #	DESCRIPTION	
700	P0651700	GUARD AND ANTI-KICK BACK LABEL	
701	P0651701	DISC PWR-BLADE LABEL	
702	P0651702	BLADE GUARD WARNING LABEL	
703	P0651703	BLADE CONTACT WARNING LABEL	
704	G8589	GRIZZLY NAMEPLATE-LARGE	
705	P0651705	EXTREME SERIES PLATE	
706	PPAINT-11	PUTTY TOUCH-UP PAINT	
707	P0651707	SAFETY GLASSES-HEARING LABEL	

REF	PART #	DESCRIPTION
708	P0651708	MODEL NUMBER LABEL G0651
708	P0652708	MODEL NUMBER LABEL G0652
709	P0651709	MACHINE ID LABEL G0651
709	P0652709	MACHINE ID LABEL G0652
710	PLABEL-12A	READ MANUAL-VERTICAL NS 7/05
711	PPAINT-1	GRIZZLY GREEN PAINT
712	P0651712	BLADE TILT ANGLE LABEL
713	PLABEL-14	ELECTRICITY LABEL

### **A**WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.



Grizzly. WARRANTY CARD

Nar	me		
Stre	eet		
City	/	_ State	Zip
Pho	one #	_ Email	Invoice #
Mo	del #	_ Order #	Serial #
		n a voluntary basis. It will be used fo urse, all information is strictly co	or marketing purposes to help us develop <b>nfidential.</b>
1.	How did you learn about us? Advertisement Card Deck	? Friend Website	Catalog Other:
2.	Which of the following maga	zines do you subscribe to?	
	Cabinet Maker Family Handyman Hand Loader Handy Home Shop Machinist Journal of Light Cont. Live Steam Model Airplane News Modeltec Old House Journal	Popular MechanicsPopular SciencePopular WoodworkingPractical HomeownerPrecision ShooterProjects in MetalRC ModelerRifleShop NotesShotgun News	Today's HomeownerWoodWooden BoatWoodshop NewsWoodsmithWoodworkWoodworkWoodworker WestOther:
3.	What is your annual househ \$20,000-\$29,000 \$50,000-\$59,000	old income? \$30,000-\$39,000 \$60,000-\$69,000	\$40,000-\$49,000 \$70,000+
4.	What is your age group? 20-29 50-59	30-39 60-69	40-49 70+
5.	How long have you been a w 0-2 Years	voodworker/metalworker? 2-8 Years8-20	Years20+ Years
6.	How many of your machines	or tools are Grizzly? 3-56-9	10+
7.	Do you think your machine r	epresents a good value?	YesNo
8.	Would you recommend Griz	zly Industrial to a friend?	YesNo
9.	Would you allow us to use y <b>Note:</b> <i>We never use names</i>	our name as a reference for Griz more than 3 times.	zzly customers in your area? YesNo
10.	Comments:		

FOLD ALONG DOTTED LINE





GRIZZLY INDUSTRIAL, INC. P.O. BOX 2069 BELLINGHAM, WA 98227-2069

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FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name		
Street		
City	_State	_Zip

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

# WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.



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